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ABSTRACT

This book is a collection of 75 papers presented and discussed at the 1963 International Reading Association conference, which promoted "Reading as an Intellectual Activity" as its theme. Papers from the conference are presented in the following four groups: main addresses, thirteen sequences of papers on different facets of reading instruction, reports of four grant-sponsored studies, and papers presented at meetings that were cosponsored by the International Reading Association. The following subjects were discussed: reading at the elementary, secondary, college, and adult educational levels, reading-program administration, content reading, reading evaluation, reading research, clinical aspects of reading, reading habits, multimedia instruction, linguistics, international aspects of reading, and differing opinions in reading. (RL)

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J. ALLEN FIGUREL, *Editor*
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Reading as an Intellectual Activity

International Reading Association
Conference Proceedings
Volume 8, 1963

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THE INTERNATIONAL READING ASSOCIATION came into being January 1, 1956, through the merger of the International Council for the Improvement of Reading Instruction and the National Association for Remedial Teaching. It is a professional organization for those who are genuinely concerned with the improvement of reading programs, both developmental and remedial, for children and adults, and with providing adequate guidance in all situations in which reading serves as a vital aid to learning.

Membership is open to all persons engaged in the teaching or supervision of reading at any school level, to parents, and to all others interested in the purposes of the Association. Members represent 50 states of the United States, Canada, Puerto Rico, and 35 other nations.

Information about membership in the International Reading Association may be obtained from the Executive Secretary-Treasurer, Dr. Ralph C. Staiger, P.O. Box 119, Newark, Delaware.

The Reading Teacher, the Association's official magazine, published eight times during the school year, may be ordered from the same source.

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FOREWORD

READING has become the most discussed subject in the school curriculum. Almost everyone seems to have some kind of answer on how to improve reading instruction in our schools. Yet, it seems sensible to follow the recommendations of people who have devoted their entire professional life to the study of reading and related problems. Each year the International Reading Association invites some of these outstanding teachers, professors, consultants, psychologists, linguists, clinic directors, and administrators to present papers at its annual convention. The meetings this year were held at Miami Beach, Florida, May 1-4, 1963.

READING AS AN INTELLECTUAL ACTIVITY is the report of the 1963 Conference. Seventy-five papers presented during the four-day period make up the report.

The Proceedings is divided into four parts: Part I contains the addresses of Dr. Ralph C. Preston, Dr. Charles H. Boehm, Lois Lenski, and Dr. Nila B. Smith; Part II, the thirteen sequences on different facets of reading instruction; Part III, reports of four grant-sponsored studies; and Part IV, the papers presented at meetings co-sponsored with the National Council of Teachers of English, The National Conference on Research in English, and the American Educational Research Association.

Over 2,500 persons were registered for this Conference. Registrants represented every one of the fifty states and foreign countries such as Canada, Sweden, Great Britain, Israel, and Tanganyika.

One of the high lights of the convention was the Saturday luncheon in the beautiful and elegant ballroom of Hotel Fontainebleau, presided over by Morton Botel, President of IRA. Pennsylvania's Superintendent of Public Instruction, Charles H. Boehm, addressed the members on *Reading Today for Living in the 1980's*. Especially delightful at this time was the awarding of citations for meritorious service to three outstanding educators: Dr. Guy T. Buswell, Dr. Miles A. Tinker, and Dr. Gerald A. Yoakam.

Miami in May was an inviting city. The school people of Dade and surrounding counties were good hosts. The opulence of Hotel Fontainebleau created a pleasant fantasy. The officers of IRA and the Program Committee planned effective and worthwhile meetings, something for everyone. All of this made our Florida visit memorable and instructive.

Neither this introduction nor the papers presented in this volume can transmit to you the spirit and enthusiasm of this world-wide group of reading teachers. If the report can give you an insight into the topics presented and discussed, it will have served its purpose.

J. ALLEN FIGUREL, *Editor*

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PART I Reading as an Intellectual Activity

1. Reading for What?

RALPH C. PRESTON

MY topic, "Reading for What?" is derived from the title of Robert S. Lynde's influential book, *Knowledge for What?*, published in 1939. Lynde pointed out that increasing specialization had led scholars "to put blinkers on." The specialist, instead of taking his culture for his framework, had permitted himself to become separated from his culture. The specialist was working with assiduity, but without much perspective. Lynde's book caused many scholars to stir uneasily in their tight little compartments and to spread themselves a bit. So far as American life in general is concerned, however, the situation described by Lynde has not changed much, a conclusion reached by August Heckscher, Aldous Huxley, Lewis Mumford, and other shrewd and sensitive observers.

The field of reading has not been spared the infection of narrow specialization. Reading is also a fenced-off area of our culture. I am not overlooking furtive contacts and flirtations with specialists from other fields such as neurology and linguistics. Fundamentally, however, our beliefs about reading reflect strongly those of the men who were our professors, and the bibliographies of leaders in the field. We engage in a number of practices which are based on inherited assumptions just as do specialists in other professional fields. The persistent, often archaic, ideas of economics which Galbraith ironically dubbed "the conventional wisdom," have their counterparts in reading.

The cumulative effect of professional specialization and isolation in reading has resulted in a greater attention on our part to the skills of reading than to the intellectual functioning of reading. It is timely and appropriate, therefore, that the theme for this year's convention should be "Reading as an Intellectual Activity." The reading skills should not be separated from the role of reading in advancing intellectual ends any more than the manipulative skills of arithmetic should be separated from the ideas of mathematics, or map-interpretation skills should be separated from ideas of the social sciences. I am not now concerned with the point of view of linguists who contend that the traditional basal reader introduces ideas in a way which sacrifices basic linguistic principles. That is another issue. Nor am I questioning the need for drill on basic skills. That is obvious. I am merely saying that upon first entering school, the child should be given to understand that reading is a tool for opening up the world of ideas, and that this point should continue to be stressed throughout his formal education. Some teachers think their responsibility to the intellectual life is discharged if they give enough attention to the comprehension and critical analysis of reading matter. As customarily handled, these are taught as skills—essential skills, to be sure, and usually well taught—but they are not necessarily skills which result in reading as an intellectual adventure.

Let me illustrate how reading is used by children in pursuit of intellectual goals. Earlier this week a graduate student told me that, when saying goodnight to his eight-year-old daughter, he found her propped up in bed, reading aloud from a book of poetry. She had inserted pieces of paper as markers at half a dozen different places in the book, and she was eager to share some of her delighted discoveries of new verses with her father. The father attributes her enthusiasm to her teacher whose interest in poetry and others of the arts is genuine and contagious, spilling over to a number of her pupils.

Let me illustrate further. A high school boy writes: "I personally enjoy going to a library and reading actual accounts of historical records . . . my father has some very thorough diaries written by my great-uncle during the Civil War. I enjoy these accounts of the battles of Petersburg . . ."

Another high school boy writes: "I have read many stories and articles on scientific improvement in our modern society. I try to keep up with all the scientific articles in *Time* and *Life*. I have read books on some of our greatest scientists. I feel it is important to keep up with the new products and knowledge of an advancing era."

These are examples of youngsters who have gone beyond classroom expectations and assignments, beyond exercises in critical reading. They are using reading to satisfy personal intellectual hungers. I am not so sanguine as to suppose that any teacher, however gifted and enthusiastic, can stimulate *all* of his pupils to direct reading toward intellectual purposes *all* of the time. I am saddened when I am approached by teachers who are discontented or discouraged because they don't reach all of their pupils all of the time, and on some days seem to reach none. We Americans are hopelessly perfectionist. Somerset Maugham remarks in *The Razor's Edge*: "American women expect to find in their husbands a perfection that English women only hope to find in their butlers." Be that as it may, in teaching, as in baseball, to bat over .300 calls for the combination of exceptional and unflagging skill and motivation. The fact remains that such teaching is going forward each day of the year and everyone of you can supply evidence that it succeeds. The tragedy is that this kind of teaching is so comparatively rare.

The Low Ebb of Reading as an Intellectual Activity

There must be many reasons why reading as an intellectual activity is at low ebb. I should like to mention three of them. The first has to do with conditions which we in the profession should be able to control ourselves, the other two with conditions which are more deeply embedded in the culture. If we can't eliminate the latter, by facing them we may be able at least to figure out a strategy for managing them.

The Reading Specialist's Preoccupation with Technical Problems

The first explanation is that our interests as individuals seem to be weighted more toward the psychological than toward the humanistic. The elemental act of reading, consisting in knowing how the different sounds of our language may be represented graphically, and in making the necessary associations with enough fluency to capture the author's meaning, is largely a problem of visual and auditory perception. Quite different is the problem of seeing to it that reading is applied to the development of ideas, a development which demands the integration of such intangibles as intellectual curiosity, drive, and mental resourcefulness. It is difficult to find individuals who are equally skilled and equally interested in both of these aspects of teaching reading, the perceptual and the intellectual. Nevertheless, the impact of this IRA convention, focused as it is on this problem, may be sufficiently great to bring about a better balance between them.

Our interest in the mechanics of the reading act is rooted partly in our own experiences. Probably all of us have had the opportunity of tackling a nonreader, despairing over his early weak responses to our heroic teaching efforts, then witnessing his transformation from nonreader to reader, and finally basking in the glow he radiates over his success. When this transformation occurs, we may feel as though we had witnessed a miracle. Indeed, having studied the reading process, we know it for a fact to be one of the most difficult neuromuscular tasks which modern man exercises, demanding a neat coordination of functions which each individual must learn, usually through considerable travail. When we consider the vast range of human intelligence, personality, and drive, we rather expect that some individuals will not respond readily to our instruction. Knowing what we do of the process, we are rather surprised that so many persons read as adequately as they do.

The layman, on the other hand, takes a quite different view. Knowing nothing about the intricacies of the reading process, he takes it for granted that his son should be able to read during his first month in first grade. If he doesn't, there must be something wrong with the teacher.

The reading teacher thus has two reasons to be preoccupied with teaching the reading skills. He works hard for the satisfaction of experiencing the breathless moment when the child learns the rudiments of reading, i.e., for the miracle. He also wants to fulfill the eager expectations of the child's parents. A third motive may be present, namely, the experience of restoring to life a retarded reader who, in consequence of failure and ignominy, has succumbed to a sort of spiritual death. Such a teacher quite naturally feels that sheer literacy is a goal worth attaining in and of itself. Unfortunately, although reading maketh a full man, as the adage runs, we know it does not necessarily make a humane or wise one; witness the highly literate German nation under Hitler. Alan Valentine has pointed out that literacy by itself may even make man twice as vulnerable to mediocrity and confusion (1). The hoodlums and barbarians of today are not more saintly than those of an earlier age even though a larger proportion of them can read.

Literacy is of value only if it stirs the intellect and forces the reader continuously to re-examine and improve his thinking and his life in the light of it. John O'Hara in *Appointment in Samarra* tells of "the woman who read her way in and out of every new book without being singed." I should like to suggest that a person does not get singed by a book unless he has learned the advantage of spending at least as much time in ruminating the contents of the book as he spends in reading it.

Another difficulty with sheer literacy is that it may become mere bookishness. Emerson was concerned about "meek young men who grow up in libraries. Hence, instead of Man Thinking," he wrote, "we have the bookworm." "I had better never see a book," continued Emerson, "than to be warped by its attractions clean out of my orbit." To some, our society's meager use of books might tempt them to be satisfied if we did at least produce bookworms, even unreflective ones. However, we must resist being so easily satisfied. We should not take our chief satisfactions in bringing about mere literacy, desirable though literacy is. It is only half the job. We need to conceive of our role in broader terms and not rest content until the learner is eagerly applying reading to some worthwhile goal. The real miracle of reading lies less in the process than in what can be accomplished through it in advancing knowledge, discrimination, love of nature and of the arts, spiritual sensitivity, and reflection.

Certain practices within the profession, I fear, tend to keep the teaching of reading a narrow, skill-centered field. For example: (1) Some universities offer doctorates in the field of reading; the major field of study itself, not just the thesis, is not psychology, linguistics, English literature, or education, but *reading*. (2) Some colleges and universities have fragmented the field of reading into an astonishingly large number of courses which appear on the surface, at least, to be thin to the point of transparency. (3) There is also a mounting burden of technical requirements in some states for the certification of reading specialists. Needless to say, teachers of reading have to have technical proficiency. However, there are dangers in looking upon the reading teacher as a technician rather than as an educator. Unless the present trend is reversed, it will be increasingly difficult to recruit for the field of reading graduates in the social sciences and the humanities —probably our best source of candidates if we are serious about wanting to teach reading as an intellectual act as well as a perceptual process. I suspect it is easier to train a humanist as a reading technician than to teach a technician to be a humanist.

Society's Attitude toward Intellect

The foregoing obstacle, which I would characterize as an imbalance in emphasis, is subject to modification by our profession. Perhaps the greatest obstacles, however, we can do little about. The most conspicuous of these is society's neglect of, and indifference to, reading. I was living in Boston in 1960 when that city, in an economy move, closed a number of its library branches and drastically cut library services. I was amazed at the apathy with which the public and the press seemed to be taking the curtailment.

Where reading is not neglected, it is sometimes debauched. Asheim and Unterbrink took a searching look at distribution centers for paperbacks, surveying the paperback outlets in a typical small city of Illinois (2). Worthwhile titles were seldom available. The better the title, the less likely it was to appear on the paperback rack at the corner drugstore and the bus station. Another investigator analyzed publications at American newsstands (3). He found that magazines and paperbacks were shot through with descriptions of physical torture, rape, seduction, and sadism. The covers of almost half of the paperbacks vividly depicted themes of sex and violence, and almost a third of their titles were suggestive. The investigator reported a significant increase in the quantity of violence and sex themes in the newsstands over the last ten years.

When children see reading used on a large scale for trivial and tawdry ends, it is not surprising if their associations with reading should be deeply influenced thereby. Indeed, investigations of children's newspaper reading show that intellectual content holds little attraction. The comics is the most consistently favored section—not only among second-grade children, who rated them first, but among twelfth-graders, who rated them second. Among the twelfth-graders, national and foreign news did not rank even among the top three choices. When eighth-grade boys were asked what part of the newspaper they would miss most, they replied: comics first, sports second; twelfth-grade boys replied: sports first, comics second (4).

The low estate of reading in our culture is brought out in various international studies. Gallup reported that fewer people bought and read books in the United States than in any other democracy (5). A UNESCO report indicates that the United States has fewer public libraries than a number of countries which are considerably smaller, such as Germany and Poland. In 1959 we published fewer books than four other countries, all less prosperous than we.

Indifferent readership is not a new American phenomenon. A century ago, de Tocqueville wrote that "nobody much esteems" the wares of bookstores (6). John Tunis, not quite so long ago, surveyed the reading habits of his Harvard classmates of the class of 1911 twenty-five years after their graduation (7). Their reading was undistinguished. Some reported their reading was confined to newspapers and magazines, some never purchased books, and their choices (e.g., Kipling, stamp-collecting magazines, the *Saturday Evening Post*) probably differed little from that of many persons lacking a college education.

There is a brighter side to the picture. Some first-rate reading matter can be found even in supermarkets and drugstores, and its audience is increasing. The latest Bowker Annual shows that almost twice as many trade books were sold in 1960 as in 1952, the leading categories being Fine Arts, Science, and Religion, in that order (8). A recent radio interview revealed that the Newark, N. J. library enjoyed a 29 per cent increase in its membership over the last five years—a period during which the city's population has been shrinking. There is also said to be an excellent distribution of paperback classics. Such reports deserve close scrutiny and are often based on the same error which occurs whenever special cases are looked at in isolation. Sampling which is not representative can yield all kinds of misimpressions.

"Excellent distribution," for example, is a relative term. Gallup still finds that only 21 per cent of Americans are book readers in any profound sense (9). The book industry remains small; in 1954 the dog-food industry was reported to be twice as large (10)! The book industry cannot count on the patronage even of all college graduates; a report released in October showed that one third of the graduates who were surveyed were not reading a book at the time and one third had not purchased a single pocket book in three months (11). Only the wry David Riesman finds crumbs of comfort in all this. The smallness of the book audience, he points out, keeps the book the least censored of all mass media (12).

The Dominance of Television

Finally, in trying to explain the small use of reading as an intellectual quest, mention must be made of the dominant role played by television in the lives of our pupils. Adults who were brought up on good reading tend to have somewhat the same prejudiced attitude toward television as the learned class of medieval times had toward movable type and printing. One great bookseller of medieval Florence said: "In this library all the books are superlatively good, all are written by pen; and were there a single printed book it would have to be ashamed in such company (13)." But despite vested interests and the inferior quality of early printing, the scriptoria in time became obsolete. Printing brought the book to an unbelievably large segment of the people. Nevertheless, probably few books have ever enjoyed a mass audience, despite Spengler's use of the term "Buch-und-Lesen Kultur," and the book-devoted public has probably never been large.

And now television brings in highly dramatic fashion to all—the illiterate as well as the literate—a class of material that for centuries could be had only through books or the theatre. Now the common man can at last be communicated to on a grand scale. The new medium is not wholly a "wasteland," as I am frequently reminded by Philadelphia's unflinchingly optimistic head librarian who prepares a news release from time to time to the effect that a televised version of *Macbeth* or *Our Town* or the like was followed the next day by a run on the book in question in the library's branches over all the city.

The popularity and influence of television is well known. In one study, high school students were asked: "Which medium would you miss most if you had to do without it?" They all replied, in all grades, "Television." Eighth-grade students ranked books second. Twelfth-grade students ranked books fourth. Thus, the longer the students remained in school, the more poorly did books compete with television as preferred media of communication (14).

Schramm and his associates point out "Television more than any other medium furnishes a common body of information for the early socialization of children (15)." Their study of the content of television programs which children watch led to their conclusion that "the picture of the adult world" presented to children is "heavy in physical violence, light in intellectual interchange and deeply concerned with crime." Schramm and his associates concluded that such an excess of violence in the child's diet can result in the spilling over of aggression into the child's behavior. A Gallup poll revealed that a majority of the public believes that excessive violence on television should be curbed (16), so eventually this situation seems certain to improve, and television may become a worthy competitor of the book for certain purposes. Meanwhile, the teacher, armed with tools to sharpen the child's mind and enrich his intellectual life, must compete with a medium which presently is permitted to dispense such large quantities of cheap and sadistic fantasy.

Toward a Revival of Serious Reading

I have described three obstacles to the successful teaching of reading as an intellectual activity: (1) the reading specialist's greater interest in reading as a performance in contrast to reading as a passion; (2) society's indifference toward the life of the intellect; and (3) the competition offered reading by television. If what I have been saying appears somewhat negative, I can only respond as did Alan Valentine in his book, *The Age of Conformity*. He wrote in the last chapter: "It is a modern cliché that all criticism should be constructive." He recommended to those demanding an easy formula for problems arising in a democracy the advice of a Cambridge professor, namely: Select any five of the Ten Commandments and abide by them. Valentine continued: "For those who seek solutions more practical (by which is usually meant less painful) a few thoughts can be offered, though with no sense of an obligation to provide a happy ending (17)." In discussing "Reading for What?" I can promise no more than did Valentine. The "few thoughts" which occur to me are the following:

Broadening the Base of Reading Instruction

We can strengthen what now appears to be a movement for teaching reading in the broad language context. Preston James, the distinguished geographer, names as perhaps the most important of the objectives of formal education, the polishing and enriching of the techniques of communication, the development of an appreciation of the beauty of the English sentence, and the gaining of a reverence for the precise meaning of words (18). All of these aspects are currently being worked at by an increasing number of teachers of reading, thanks in part to the influence of the linguists. More teachers could undoubtedly be persuaded to include the general language area as their province instead of just reading. Those who award state licenses to reading specialists should certainly ascertain whether applicants possess broad qualifications in the knowledge, use, and appreciation of the mother tongue. Apparently this is not adequately done, but it could be done. From time to time shocking evidence of lack of appreciation for the precisions of English syntax and words creeps into news bulletins of local reading associations. For example, one reading specialist began an article in one of them with the sentence: "As a reading specialist there are many questions that come to mind." This sort of thing will undoubtedly decline as the profession develops a greater capacity for criticism within its ranks. There are signs that we are moving in that direction. I need only refer to our excellently edited journals, *The Reading Teacher* and *The Journal of Developmental Reading*. The time will undoubtedly come when we shall not hesitate to pin back the ears of our careless brethren—whether careless in syntax or in ideas—with the same abandon and bluntness as reviewers feel free to do in that stimulating journal, *Contemporary Psychology*. In any case, we can press for much more work in English and the other humanities in the preparation of reading teachers than is at present required.

Stimulating a Love of Learning

Greater teacher emphasis on love of learning and not just learning will help to put reading to work as an intellectual activity. We all knew teachers who succeed in stimulating some of their pupils to go on reading after the reading lesson is over and after they leave school. What technique do they employ? Unfortunately, there is no neat SQ3R device, no 4-step Fernald method, nothing that can be reduced to a formula for teaching love of learning. Teachers who succeed in doing it are themselves devoted to reading, just as was the teacher I mentioned earlier who instilled in her eight-year-old pupil a passion for reading poetry.

I fear that some materials prepared for reading teachers run counter to building a love of learning. A recent survey of how-to-study books suggests that many of them teach high school and college students how to "beat the game," rather than lead them to love learning. The catalogue description of one book on how to take examinations reads: "It is not those who can write well on something they know who succeed, but those who can deal brilliantly with subjects of which they know nothing." The how-to-do-it books which are most rewarding for teachers who desire to teach love of learning are those which contain no formulas, but which engender enthusiasm for the life of the intellect. This is true of Mortimer Adler's *How to Read a Book,* Ernest Dimnet's *The Art of Thinking,* Arnold Bennett's *How to Live on 24 Hours a Day,* Gilbert Highet's *The Art of Teaching,* and many others.

More specifically, reading teachers can promote love of learning by applying a discovery approach to their teaching. The fact is notorious that subjects like history are a crashing bore to most students because of the unimaginative way in which they are so often taught; i.e., by the requirement to read and memorize page upon page of highly condensed factual material without preparation or elaboration. Jerome Bruner in his address to our convention three years ago emphasized the importance of having the pupil gain as much knowledge as possible *through the use of his own mind*. I can illustrate this by telling how I have seen one teacher use Peattie's fascinating book, *Look to the Frontiers,* which deals with the timeless problem of boundaries between political units. Before her students read the book, they were required to think through for themselves the problem of establishing satisfactory boundaries. What boundaries are best for political stability and for the security and well-being of the states or nations involved? What about mountains? What about rivers? What about artificial boundaries laid out by surveyors? After they had formulated their own hypotheses and drawn tentative conclusions, they started reading. When Bruner was with us, he pointed out that a child who has had a steady diet of this kind of instruction becomes genuinely absorbed in the subject under study rather than absorbed in the desire to please his teacher or to get a good mark. Moreover, the child develops a style of thinking characterized by inquiry.

Another way in which we can develop love of learning is to encourage what Keller calls "post-holeing," what Dale calls "uncovering ground rather than covering it," and what others describe simply as exploring a topic in depth. Post-holeing seems to be gaining in popularity, and this is a good sign. A word of warning, however, should be given. Reading in depth does not always produce either clear knowledge or perspective. German scholars are fond of the aphorism: "The German philosopher dives deeper and comes up muddier than anyone else." Children can come up muddy too. Follow-up discussions after depth reading are always in order.

It also enhances learning if the reader can crawl into the author's skin and look at the subject through the author's eyes. I know teachers who spend a good deal of time in helping their pupils attempt this. The linguists have sharpened our consciousness of the need. Fielding observes in one of his innumerable and amusing asides in *Tom Jones*: "Every book ought to be read with the same spirit and in the same manner as it is writ." Since Fielding suspects that ale is not only the source of an author's muse, but the muse itself, he drives his point home by suggesting that the reader pursue his book with a glass of ale in his hand. Psychological research on empathy in the arts is in its infancy and offers us little guidance. Here is a fertile field for teacher experimentation in the classroom.

Devoting More Time to Applied Reading

Finally, experimentation is in order to determine the optimum time required to teach the mechanical skills of reading in the primary grades. It might well reveal that present time allotments for directed reading lessons are uneconomical and that more time could be devoted to browsing and reference reading. A study by Arthur Gates and Miriam Pritchard is pertinent. With reduced instruction in reading per se and increased social studies projects, a group of slow learners "apparently acquired as much reading ability as equivalent pupils in the conventional school . . . The children established habits of wider reading and enjoyed reading more (19)." This experiment suggests that beyond a certain point, additional drill may yield negligible returns. The experiment needs replication, of course. My hunch is that further experimentation will point to the possibility of allowing more time than is now considered feasible for applying reading to the unearthing of fresh content and new ideas.

In conclusion, my thoughts concerning ways of bringing about a higher type of readership have been threefold: (1) the language base of reading instruction could be broadened; (2) a greater love of learning through reading could be stimulated; and (3) more school time could possibly be allowed for applied reading.

Albert Lynd in his savagely critical but witty book, *Quackery in the Public Schools,* points out that "Education is the only important profession whose practitioners spend much of their energy in an effort to decide just what the devil they are supposed to be doing." The title of my talk, "Reading for What?" would suggest that another hour of energy has been spent in this effort. My own feeling is, however, that in view of man's great intellectual potential, on the one hand, and the neglect of his intellect on the other, we shall have to continue to address ourselves to this question for a long time to come.

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2. Reading Today for Living in the 1980's

CHARLES H. BOEHM

After attending the many meetings of this convention, you can unequivocally attest that this conference has been dedicated to the improvement of reading instruction in our schools, the schools that are teaching the reading citizenry of the next decades. Such a focus makes my assignment most appropriate because I am to discuss with you, "Reading Today for Living in the 1980's." Needless to say, to live in the '80's, reading competency must be raised. If we can raise the level of reading competency approximately one year within the next decades, a real renaissance in education awaits the '80's. Leadership from *you* can make such a renaissance possible.

We cannot discuss reading improvement without viewing the world in which we live. This concerns me greatly. The demands of our cybernated society are exacting; requiring a labor force and an electorate with considerably higher education than now prevails. Yet, are we providing and making future provisions for progressive substantive changes? Are we, as a nation, which idealistically has sought to be exemplary to others and which pragmatically desires to be independently competitive, concerned in providing rich, educational programs for all pupils. If we are, we should not have the accumulation of permanently unemployed in our economic structure.

We know that whether democracy rises or falls depends upon equality of educational opportunity. Certainly, equal educational opportunity cannot exist if pupils are not provided with the experiences they need to reach their potential in reading. Last year, Dr. Donald Durrell reported to this group the reading achievement of 200 first-graders in the town of Lynnfield, Massachusetts. The first-graders in this group made an average achievement of 3.2 on Metropolitan Reading Tests in June. Ninety-two per cent, or 192 of the 200 children were reading above second-grade norms. Remarkable! How can superintendents of other schools produce comparable results? One way to make real progress is to provide leadership in offering quality in-service programs.

Leadership in the teaching of reading at the state level can make a difference too. The State Council of Education in Pennsylvania established reading as its first priority in curriculum development. The Council now requires that each elementary school have a school library, has set standards for elementary library service to include all instructional materials, has "upped" requirements for secondary school libraries on a broader scope, demands that developmental reading be taught in grades seven and eight, and requires that all secondary school academic teachers have basic pre-service experience in reading instruction prior to certification. The State Council has also employed a full-time staff member to work with our 77 teacher training institutions in improving their reading offerings. Improvement is to be based on research designed and developed with cooperating institutions.

Pennsylvania was active in seeking federal support and assistance for improving instructional programs. As a representative of the state, I testified before the Bailey Committee, indicating that the categorical aid offered by the National Defense Act "fell short" of its stated objective. It failed to recognize the role of reading skills and written composition in undergirding our manpower.

In redesigning college campuses in Pennsylvania, plans will call for at least $2,000,000 or more to be allocated for library facilities. Reading clinics and provisions for in-service training will be part of the Reading Service Program to schools and classroom teachers.

I have great faith in our classroom teachers. They want to improve the reading of their boys and girls. They plead for help. They are eager for able, instructional leadership. They have the moral right to expect it! The question is, "From whom should they expect it?" Is it the responsibility of the institutions who train our teachers, the local districts for whom the teachers work, or their state department of education? To me, each has a responsibility.

The Harvard-Carnegie Group reported in their study, "The Torch Lighters," that teacher training institutions have permitted teachers to have only a meager general background in reading. At the same time, they recommended a more intensive specialized reading program for the education of teachers. To accomplish this, we would have to wait until 1985 for improvement of reading in our schools unless there is a sufficient "turnover" in our teaching personnel. We cannot wait! Our reading programs must be stepped up! The following must be done:

1. Provide intensive in-service programs in reading for teachers and specialists. Frankly, I prefer to think of reading specialists as reading generalists. I have found that reading becomes a part, rather than a segment, of the total school program when a specialist brings to a school a broad background of experience as well as special training in reading.
2. Surround boys and girls with a wealth of books, wide and varied in interest at home and at school. Elementary school libraries should be required in all elementary buildings.
3. Plan a developmental reading program for all pupils in grades 1-12.
4. Evaluate the reading experiences we are offering our pre-service and graduate students.

Important Keys of Reading Instruction

Some claim that there is evidence that reading instruction is no better today than it was one or more generations ago. Whatever we want to believe, we must admit that not all teachers in all communities are using all of the "keys" of modern knowledge about learning to read. May I, then, discuss with you those "keys" that appear to be most important to us in terms of current practice regarding (1) individual differences, (2) reading, one aspect of language, (3) interests, (4) thinking, and (5) word indentification and vocabulary development.

Individual Differences

Although there are many published reports on the subject of individual differences and the principles of providing for individuals among pupils are generally known, we still have some pupils who are still receiving uniform daily diets of instruction from the source text. Such teachers are struggling to find the educational answer to the query: "How can we organize reading programs to care for individual differences and the differences within each individual?" Of course, this is not true of all teachers. Many are teaching pupils when they are ready, whether they are in the kindergarten, the first grade, or a higher grade. They know that beginning formal reading instruction is not dictated by a grade level or an age level. Too, levels of reading instruction are no longer mandated by standardized tests. They have a place in a reading program but systematic informal reading inventories and sound teacher judgment are given equal consideration. Professionally competent leaders also recognize that a three-group plan prescription for every classroom is a poor method of providing equal learning opportunities for all pupils. They encourage their teachers to use varied plans of individualized and group instruction in providing for individual differences. At the same time, they make a *marked distinction* between the terms individualized and group "methods" and individualized and group "plans" for individual differences.

Reading, One Aspect of Language

Another important key is to remember that reading is only one aspect of language—the third aspect. It is preceded by *listening* and *speaking*. It is followed in sequence by *writing*. Therefore, teachers must understand and appreciate the *listening, speaking* and *writing abilities* of pupils if they are to understand their *reading abilities*. It is a tall order. To help pupils to prepare for the '80's, teachers must know the kinds of skills necessary to listen socially, secondarily, aesthetically, critically, concentratively, and creatively. They must know the skills and techniques necessary for helping and encouraging pupils to do the following: (1) speak clearly and distinctly, (2) develop an adequate vocabulary for the world in which they live, (3) use acceptable and appropriate language, (4) vary their sentence structure, yet keep their sentences clear-cut and interesting, (5) organize their thoughts before speaking, and (6) be spontaneous with critical and creative ideas. Pupils need guidance in learning to write. An effective writer is one who (1) uses adequate and appropriate vocabulary for "his times," (2) is creative, (3) uses acceptable and appropriate language, capitalization, and punctuation, (4) presents well-organized ideas, (5) spells correctly, (6) write legibly, and (7) proofreads what he writes. Unless reading is presented as described, as one aspect of language, it cannot be effective. The teaching of reading *must be* presented in a general language development setting.

Interests

Developing lifetime interests and tastes in reading is a major goal of reading instruction. Some kill it! Others nurture it! Although some protagonists would like to attribute the success or failure of interest in reading to a particular plan or a particular method, they fail to remember that *plans* and *methods* do not do the work. *Plans* and *methods* work when the competent teacher uses the best of *all plans* and *all methods*. Whether a pupil's interest in reading is being raised or silenced will depend upon the attitude and competency the teacher reveals in (1) understanding him as a human being as well as understanding his interests, (2) supplying a wide and varied range of readable materials, (3) providing a favorable environment conducive to fostering a desire to read, and (4) guiding his parents in his reading activities and interests.

Thinking

Those who think, read! Those who read, think! Although teaching pupils to think is an important "key" of reading instruction, there is ample evidence that this goal is not being developed. Pupils who have learned the mechanics of reading far outnumber those who have learned how to think. According to Betts, the thinking facet of reading instruction is based on four fundamental considerations: (1) thinking in reading results in comprehension, (2) thinking in reading is thinking in a language, (3) thinking in reading is required for relationship to take place between the reader and the author, and (4) thinking in reading is required if skills are used for a specific purpose. Because thinking cannot be mechanized, many pupils are deprived of the privilege of being taught to think. However, competent teachers can stimulate their pupils to think within the limits of their potential. Literally, our real business of teaching pupils to read is teaching pupils to think. They will need to think in the 80's. They need to think today.

Word Identification and Vocabulary Development

Word identification and vocabulary development are two important keys to reading instruction. Underemphasis or overemphasis of either or both depends upon the emotions of the teachers or the educators and journalists with whom the teachers are surrounded. We know that to read a word is to recognize it, know what it means, and use it. To recognize a word, a pupil must be supplied with a multiplicity of methods. Telling a pupil a word is not a method. Systematic and sequential instruction in such skills as structure analysis and phonetics analyses is needed. The issue should never be one of "phonics" or "no phonics." It should be "how to teach phonics." The same is true in developing vocabulary. Telling a pupil the meaning of a word is no assurance that his vocabulary has been extended. However, the teachers who develop concepts, by helping children organize their own personal experiences and by leading them to their own verbalization of their experience, will be yielding a vocabulary for their pupils to use in the '80's.

The Challenges Ahead!

As I reviewed the five important "keys" of reading instruction, I kept inquiring of myself, "How can the professionals attending this conference help improve reading instruction in their schools? What challenges lie ahead for them?" Frankly, I found it difficult to know where to begin "suggesting" about a subject that offers so many challenges. But, after some thought, I decided it logical to start with improvement of classroom teaching.

Teaching in the Classroom

I believe that the greatest challenge that confronts us as teachers of reading is the improvement of classroom practice. Although many questions remain unanswered, there is sufficient knowledge for us to use in improving the quality of reading service. Current writings indicate this. Russell in his article, "Reading Research That Makes a Difference," (*Elementary English,* February 1961) listed ten major studies which have widely influenced reading over the years. Of course, teachers will always continue to ask, "How can I know and help every pupil with thirty or more pupils in the classroom? How can I provide each one with the best possible instruction in reading?" Although the task is not an easy one, competent teachers accomplish it. Their pupils learn to read. Unfortunately in our schools we have three kinds of teachers as we have three kinds of pupils—the able, the more able, and the less able. Each can be identified. Criteria can be established for observing teachers or for interviewing them when the pupils are not present in the classroom. A list of questions that has proven effective in distinguishing the superior teacher of reading from the poor teacher of reading includes:

1. Do you understand the reading process?
2. Do your pupils enjoy reading?
3. Do you know the role your school is accepting in developing a society of readers?
4. Do you surround your pupils with wide and varied reading materials?
5. Do you know the potential capacity and reading status of each individual?
6. How do you encourage each pupil "to do his best"?
7. Which do you emphasize more among your pupils, *participation* or *competition?*
8. Do you provide equal educational opportunities for your pupils—the able, the more able, and the less able?
9. Do you permit your pupils "to learn and grow in reading" at their own pace?
10. Is reading emphasized as the third phase or the first phase of your language program?
11. Do you provide opportunities for your pupils to implement reading skills creatively and functionally in the content areas?
12. Do you provide a reading program that functions in *all* daily activities of each individual's life?
13. Do you know the general, the basic, and the specific reading skills that should be introduced,

developed, and maintained with each individual at each level?

14. Are your pupils flexible readers?
15. Do you guide each individual in selecting and using all available instructional materials?

By using the above list, you will be able to observe the following: (1) those teachers who need help in teaching reading in the classroom and, (2) the kinds of help that each teacher needs.

Current popular plans offering help to teachers are (1) find a new administrative organizational plan, (2) revise the reading curriculum, (3) provide an in-service program in reading, and/or (4) hire a reading specialist. A new administrative plan may cause a "chaos" rather than "cure." A revision of the reading curriculum does not assure a "revision" of the teachers who are to implement the program. An in-service program may range from a "tell them" program to a "do them" rather than a program of professional laboratory experiences. Too, the hiring of a reading specialist may be hiring just another teacher because competent reading specialists are rarities. However, I do not mean to imply that the four plans suggested should not be encouraged to improve reading instruction.

Reading Programs

There are many different reading programs existing today. This, I believe, is as it should be. No one reading program will "fit" all communities, all schools, all school personnel, or all children today. Neither will one reading program "fit" everyone in the '80's. The staff of each school must develop its own reading program. The program the staff members design should depend largely upon (1) what they believe and know about the role of the school, (2) how they think pupils grow and develop, (3) how they think pupils learn, (4) what instructional materials they can provide, and (5) how they understand one another and work as a staff group.

Instructional Materials

To be prepared for the '80's, pupils must know how to use every available reading source. Therefore, our classrooms must be equipped with the many and varied tools used in the teaching of reading. The textbook has served many useful purposes and will continue to do so. But, to improve classroom instruction in reading, pupils must have access to more than their basal texts. Every school should have a well-stocked school library in addition to a well-stocked classroom library. A plentitude of tradebooks, textbooks, reference books, periodicals, globes, maps, charts, pictorial aids, films, filmstrips, slides, tape recorders, and other instructional aids should be found in every school library. More and more school libraries are becoming the "instructional hubs" of the school.

Mass instructional techniques such as television teaching, teaching machines, and programed texts are entering the reading scene with great rapidity. How effective they will be in differentiating and enriching reading instruction is being tested. Though many reading authorities believe that teaching machines and programed texts have excellent possibilities, television teaching remains in question because it is apparent that a teacher is preferred to a television screen for direct thinking and action among a class of children.

Sequential learning "package" is another aid for improving reading instruction. The SRA reading laboratories are examples of this type of reading aid. Although some may quarrel with the use of these self-directed, self-corrected methods, they do allow for intensive practice and for different levels of progress rates. "Packages" can be used in teams and groups which many teachers find more effective than having pupils "solo" in their work. I sincerely believe that more packages will be developed to provide intensive practice in various basic skills such as phonics, structure, skimming, rapid reading, and reading for details. Who knows the effect such "packages" may have on the improvement of reading instruction? All is in question.

To synthesize, all instructional materials offer interesting possibilities—some more than others. If we examine the quality of the products offered rather than the "machinery" that is offered, we may be able to introduce processes which are intellectually higher in nature. The future of instructional materials holds great hope for the improvement of reading instruction.

Teacher Preparation

Teacher education is a vulnerable topic. Critics certainly do not compliment pre-service programs. Neither do they flatter the in-service education programs that are currently being offered. Two weaknesses are apparent in the pre-service training of teachers (1) an overload of verbalism that is imparted through lectures and discussions and (2) the quality of practice teaching experiences that the pre-service student receives. Dr. Mary Austin's Harvard-Carnegie report, "The Torch Lighters," stated that 84 per cent of responding institutions were gravely concerned with the quality of practice teaching experiences of their students. This is most disturbing. However, many teacher training institutions are giving great consideration to these weaknesses as they review and re-design their teacher education program. More laboratory experiences are being added under more effective conditions. At least I can report that this is what is happening in the teacher training institutions of Pennsylvania.

The effect of pre-service programs upon in-service programs will be gradual. Because of the complexities in some school situations, pre-service will never affect in-service. In-service training is complicated by factors such as, (1) the professional life of the normal teacher today is usually short, (2) the teacher shortage today has demanded that local districts recruit the local mothers and grandmothers, and (3) colleges are not adequately staffed to offer professional guidance to their nearby local districts. Certainly new methods for improving in-service education need to be explored. I feel that there is tremendous potential in both pre-service and in-service education. Which will be first to "top" its potential is questionable. However, we cannot wait until the '80's for improvement of either program. We must take steps for immediate improvement of both.

Research

Research is the business of everyone interested in reading improvement. No one can disagree that it is difficult to dispute programs, policies, methods, and techniques that are "founded" on well-designed and well-developed research. We cannot say that we "need" more phonics nor can we say we are "for or against" linguistics, speed reading, the New Castle reading experiment, teaching machines, television teaching, team teaching, individualized reading and other organizational plans until we have sound and sufficient research to prove it. You cannot improve reading instruction by listening to the faddists and fanatics or by accepting their script popularized by the journalists. But, if we expect teachers to interpret basic truths from superficial truths, then the institutions who prepare teachers must provide their graduates with two kinds of experience (1) teach them the necessary skills they will need to read research with some degree of proficiency and (2) train them to use the problem-solving technique known as "action research." At the same time the United States Office of Education, state departments of education, and institutions of higher learning must become more actively involved in producing well-defined and planned research. Many state departments and institutions are accepting more responsibility for research through research departments and research centers, staffed by part-time, and in some situations full-time personnel. With the many unanswered questions and the many panaceas continuously being suggested, there is a tremendous need for the researchers to "search" so that we do not sell our boys and girls "short" in preparing them for the '80's.

Living in the 1980's

Why must we meet these challenges in reading to live in the 1980's? The answer is simple. Living will be different. It will be vigorous and ambitious. Here are some of the significant assumptions which underlie my thinking:

1. There will be no mutual pact against complete annihilation via a nuclear melodrama.
2. Our concepts of travel, time, and space will be modified.
3. The spectacular developments in

medicine will aid the human body. The life expectancy of man will move to 85 and upward. A useful expectancy of 110 years is now the exciting goal of the biochemist.

4. There will be a vastly higher educated electorate to cope with the difficult economic, social, and political problems.
5. The composition of our labor force will be different. Already there are fewer opportunities for those who receive less than one or two years of college or technical training. Cybernation is in the process of modifying, if not eliminating most white collar jobs!
6. Our society is research oriented. It will remain so.
7. Technically oriented industries will give new impetus to our society. *For example*: The $25-billion space industry will replace today's $15-billion automobile industry. This will be the leading gauge of our economy.
8. The nation will have accepted education as a lifelong process.

Man's Greatest Challenge in the 1980's—FREE TIME

In conclusion, permit me a few minutes to discuss man's greatest challenge in the 1980's—FREE TIME. Those being born today will never experience anything other than the equivalent of a three-day weekend. Already, the production of better goods in a shorter time has given man the dream of the ages, freedom to pursue a concomitant career. I am not certain that we are psychologically prepared to understand this impact of FREE TIME upon our lives. I am not certain that we will be prepared in the '80's. Many of us may terminate our earthly endeavors as "unreconstructed" rebels to the new order. We may be unhappy and melancholy because our whole career has emphasized the earning of a living. We may instinctively recoil from working hard "for free!" This certainly is not in harmony with our traditions.

What will man do with this FREE TIME in the 1980's? Will he take real advantage of this time or will he look at more late, late television shows? Will the new FREE TIME cause man to become a Frankenstein? It shouldn't if the schools have encouraged them to read widely and have laid the basis for a variety of interests. FREE TIME for service and creativity can give man an opportunity for the fulfillment of his noblest aspirations. At the same time, it can help to build a more enduring culture. FREE TIME in the 1980's can be man's greatest challenge!

3. Creating Books for Children

LOIS LENSKI

Creating books for children has been the joy of my life. It has been my pleasure and privilege to write and illustrate books for children from the ages of one-and-a-half to 14, in various age groups. I have never tired of it.

It all began many years ago, when I was living a very isolated life in a remote part of New England, and when I felt very much cut off from the world. My son was growing up and so I began making picture books for him. Older and longer stories followed. One by one, from that isolated little studio on the edge of a hayfield, my books went out into the world, making friends for me all over the country. In such a way, when I least suspected it, I can see now that I was following the path of my destiny. A little later, an opportunity came for travel back and forth across the United States, and so a new world opened up for me, not only for the widening of my own personal experience but providing a never-ending source of material for my books.

I was given the privilege of sharing in the lives of children in many different environments and to show, through my stories, how American children live. Our children are not all alike, they do not all think, speak and act alike, they are products of that little piece of our country in which their roots happen to have been put down, in which they grow and flourish or, as sometimes happens, survive against adversity.

I have learned a high regard for children. No matter where a child lives, he retains his capacity for astonishment and wonder, his eager curiosity about life and all those indefinable sensations that the impact of his own little world makes upon him. He may not understand the stereotyped conformist world we usually consider our American way of life, but he knows and understands every detail of his own small world. I never fail to be amazed at children's versatility. They are wise and thoughtful, often stoical, meeting whatever comes with resilience and equanimity, yet always retaining an innate capacity for sensing the joy of life. And yet it is wrong to make generalizations about them. Each child is an individual, each a person in his own right, and what he is, is determined largely by the place where he lives.

Come with me. Let us look at the ways of life in our country. Let us go into out-of-the-way corners, up on the hills and down in the valleys, into city streets and village homes. Let us see and get to know the children. Here and there, roundabout America, are friends worth knowing.

Come with me. I will take the reader by the hand and together we will go into a mountain cabin, a snowbound schoolhouse out on the prairie, a floating houseboat on the Mississippi River, a barracks housing project in a large city.

Come with me. Down on the bayou in Louisiana, a little girl called Suzette is fishing. She takes her string of fish to Père Eugene, the country storekeeper, and swaps them for groceries, plus a little tobacco for Papa Jules, who cannot work because he has a bullet in his back. Out in the middle of a cotton field in Arkansas, Joanda is pulling a nine-foot sack full of cotton. She tells me a poignant story, how her brother Ricky was run over by the boss-man's tractor and all the trouble that it made. There's a brand-new tractor on the corn farm in Iowa, and Dick, even if he suffers from rheumatic fever, is determined to drive it—until he has a bad spill.

Up on the mountains in the Blue Ridge, a boy sits on a rail fence, watching the sun go down. He is worried about the moonshiners hidden away in the underbrush, and about the trouble that threatens Granny Trivett in her cabin near the big cowcumber tree. Padding along on her bare feet in the white sand behind the old white mule, Birdie Boyer feels the hot Florida sun beating down upon her head and wonders how contemptible her neighbors can be. Out in South Dakota a blizzard is raging, and a brother and sister are trying to make their way through waist-high drifts to get home from school. Should they have stayed all night and slept on the hard school floor as Teacher wanted them to do? Or will they be able to get home safely?

In an old half-broken jalopy, Judy, in overalls, rides along singing, *You are my Sunshine,* happy, although she has no idea where she will sleep that night or what she will have to eat for the next meal. A big passenger train chugs along the railroad track, and a little dark-skinned girl thinks longingly of the beloved grandmother she has left behind and is fearful of the changes that city life will bring.

In the middle of the Mississippi River, a little girl lives on an island, and when the johnboat is gone up or down river, she has no way to cross over to the mainland or to call the doctor when illness strikes. A boy on a peanut farm in eastern North Carolina works like a man to help get the crop out. Another boy in a northern city has his home in a two-room barracks housing project on a city dump, and there he runs and plays. On a Texas ranch, a girl maliciously gallops her pony across her neighbor's vegetable patch, and a boy in Oklahoma lives through the excitement of the coming of oil on his father's farm.

These are real children, every day American children. These are all real children I have known and loved, whom I have visited and who have taken me into their hearts and homes and lives. These are children I have written about. They are not dream children, whom I have imagined. They are all flesh and blood. As I tell you about each in turn, and the setting in which he lives, I can visualize clearly the living child I had the privilege to know. I use the present rather than the past tense, for although many of them have grown to manhood and womanhood since I knew them, they are still alive, as children, in my books.

How Does One Write a Book?

The creative process is difficult to put into words. It is not easy to explain how an author puts a real child on the printed page, so that the child and his experiences will come alive for the reader.

The first step is preparation.

The mind must first be filled, saturated to the point of overflowing, with the subject matter. It must be so filled with it, that all other considerations are crowded out, that one's daily life becomes routine and puppetlike—so real is the life being lived within the mind. This can only be possible when the author has, through the closest kind of association with the people she wants to write about, forgetting her own life and her very existence, identified herself with them in all sympathy and understanding, without reservations.

When such, almost sacred, preparation has been made, then one is ready to proceed. Not only the conscious but the unconscious mind is ready to help. By some remarkable process, which probably only our Divine Creator can explain, the story takes form, an outline appears, and scene by scene, the story unrolls like a panorama, with little conscious control. Somehow this elusive material, the fragile breath of the great adventure of living, resolves itself into the form and shape of a book, notwithstanding all the many tangible requirements of plot, style, format, line, page, chapter, and manuscript length. To take this living material and compress it into the mold of the printed word is not easy.

To make and place in the pages at strategic points, illustrations which not only interpret but enrich and amplify the drama, is also no simple task. I have often felt that not I but some greater power was guiding my pencil, enabling me to put intangible qualities into a drawing, qualities that my conscious mind had not conceived at all. By some strange alchemy, places seen with human eyes, adventures humorous, tragic or commonplace heard with human ears, elusive thoughts, feelings and emotions experienced by a group of people somehow fuse themselves together into one artistic whole, assuming all the requirements of bookmaking and become that wonderful creation—a book. After such experiences, it is easy to believe that the making of a book is truly a creative process.

I live with the people I want to write about *before* I write about them. I live with them in spirit *while* I am writing about them. I see them alive before me as I put their likenesses down on paper in the form of words and illustrations.

I do not live in an ivory tower, apart from the world, and dream up my characters. I could not dream them up because the human imagination is inadequate. I could never imagine children like those I have described to you. Many children's books do have imaginary characters and plots concocted in the mind of the author. There is a limit to human inventiveness, and such plots are apt to become repetitious, the resulting theme is apt to be one of selfishness—the hero wanting something, and after certain frustrating obstacles are removed, getting it.

Real life is not so neat. The plots of real life are not found in the "How To Be a Successful Author" book. The plots of real life are not fantastic things, masquerading, condoned and often praised as imaginative—things like finding treasure in a hidden cave, exposing the bad guys and getting them arrested, or even paying off the mortgage. Real children do not do things like this. Why not put real children into books?

No—the plots of real life are not so flashy, they are more subtle. They are, perhaps, the drama of siblings and playmates, the drama of growing up, the drama of the adjustment to a new situation or change of environment, the mastering of fear by the acquisition of courage, the hazardous drama of a parent's occupation, always so deeply felt by a child. Real life needs no apologies. It is full of drama, which needs no artificial manufacturing. Things like these have to be seen through a child's eye and mind first, before the depth of their interpretation can be achieved in the pages.

How Can an Author Share the Lives of Others?

All creative work is based on feeling. An artist or an author (to me, they are one and the same) has to *feel* what he does. To draw the picture of a child sweeping with a broom, I myself must first take broom in hand and go through the motions of sweeping. To draw a boy pumping an old-fashioned pump, I have to leave my desk, pump a pump in pantomime, then go back to my desk and amazingly, I find I can draw it! To draw a child picking cotton, and to write convincingly about it, I must first go into the cotton field with the children and pick cotton with them. I have to bend my back, feel long hours of hot sunshine upon my shoulders, endure the weariness of the never-ending day—only then can I share the cotton child's life well enough to write of it.

Even in a picture book for the preschool child, I as author and artist, must somehow catch up the essence of the small child's world, forget my adult world and way of thinking, become a child at heart, live with him his simple doings and activity, listen to his every word with respect, and try to interpret all he does. To the very young child, a drawing is not a picture on paper, a convention in two dimensions, it is a real happening. When the three-year-old sees the boy in the picture holding a boat in his hand, he says to him, "Put it down. Put the boat in the water!" The picture boat, boy, and water are as real to him as reality itself. And so the author-artist must sense this, and draw pictures that have the very breath of life in them.

To write the roundabout and regional stories, it was not enough to do research in the library and *read about* a particular region. Even a single week spent in the region itself is worth six weeks spent in the library. Why? Because all the things I want to know about my people and the way they live, have been left out of the books, and only the surface, the outward things, the superficialities, kept in. I do not want hearsay, I do not want the opinions of others on the way they *think* these people live. I want to talk to them myself, to hear their tone of voice, to hear the way they pronounce their words, to see the pain or the joy in their eyes, to listen to the child's outpourings myself. I want to become one with the people who live in the region.

That is why I must go there. The hardest of all journeys is into the heart and mind of another person. We seldom know those who live with us, whom we see and talk to daily. To share an alien way of life means first forgetting oneself completely, only then can I take on the new and different and make it my own. Just how it is done, how one gets beneath the skin, how one learns to share the mind and heart of another is a creative process I cannot explain. All I know is that it is necessary. While I was born in Ohio and lived there in my growing years, and since then have lived for 30 years in New England, my home place is elsewhere. My roots have been put down in each of the regions I have written about. I have not one, but many home places. Something of my heart is left in each place that I write about.

One can tell only the outward things. Days spent talking to children and listening, always listening, visiting their school, their homes, getting to know their parents and earning their confidence, eating at the kitchen table in the heart of the family. A definite identification with each child chosen as hero or heroine, many days and weeks of thinking as he thinks, doing as he does, reliving with him all the dramatic moments which he so trustingly and candidly and often poignantly confides—often things he would not tell his own parents—all these things help make the child come alive in word and picture. And so my books become a mirror held up to life, to reflect back all its reality, not a distorted picture all "sweetness and light," but its flaws and sadness as well as its joys and its beauties.

To write of real children means a close rapport with them, a positive identification with them. I must *be* that child in spirit for many months while the work is in progress. I eat, sleep, speak, and act as the child acts. He becomes more real to me than members of my own family whom I am seeing daily, because I have entered his mind and thought. I think and feel as he thinks and feels. He comes alive under my pencil.

Truly my beloved Regional children have become as my own flesh and blood. As Kipling's Mowgli said, "We be of one blood, thou and I" and this enabled him to communicate with all the creatures of the jungle. So have I become blood-kin with my Regional children, with Joanda and Suzette, with Dick and Billy Honeycutt and Orvie, with Birdie Boyer homeless Judy, and all the rest. There is only one way to write my books—to live the child's life with him. The child's living presence, his spirit, must be my guide, first, last and always.

The Creative Process

Being one with them, not an alien adult from another world, but a sympathetic soul sharing their eager curiosity, their faith and ready acceptance of an uncertain world, their hopes and joys as well as their problems and sorrows—because children in even the most undesirable environments and deplorable conditions are never entirely bereft of hope—all this sharing becomes a part of the creative process.

And so a living drama must have its roots in living.

It becomes a mirror held up to life. And because it takes from life, so should it reflect back to life. It should be rich in all its implications for the discerning child reader. Such a child, living in a totally unlike environment, reading such a book, should be able to reach out beyond his narrow horizon and live the life of the book's hero, even as the author lived it. He is able to forget his own smug comfort and satisfaction and selfishness, project himself into a new sort of life never experienced before, a life with some sorrow or tragedy perhaps, but through it all, to share in the hero's courage, fortitude and endurance, and thus in the reading, take new courage unto himself. Through such a book he experiences the feel and the flavor of a life very different from his own, and in the sharing, widens his own powers of love, compassion and understanding.

The creating of books is a varied process. There are as many ways of creating books as there are authors. I speak for myself alone. Creating books which reflect the many varied ways of life in our country, with all the honesty and courage and sympathy at my command, has been a pleasure and a great privilege.

4. The Year Ahead in IRA

NILA BANTON SMITH

It was thoughtful of Dr. Botel to suggest that I take some time on this last morning of our 1963 Convention to tell you about the year ahead in IRA. Right now when we are basking in the warmth of Floridian hospitality, enjoying this splendid program, feeling surges of enthusiasm for Dr. Botel's excellent administration, it may seem a bit incongruous for me to be talking about the year ahead. Yet our organization is so large and important, its official duties are so numerous and profound that its activities for each year must be carefully planned a long time in advance. I have been planning for the coming year ever since April of last year when I received a telegram from Dr. Botel telling me that you had been kind enough to elect me to an important post in IRA.

I feel exceedingly humble at the thought of taking leadership in the near future of our organization, particularly as a successor to our wise, dynamic and gracious Dr. Botel. I'm sure you'll agree with me that I can't possibly fill his shoes —either literally or figuratively.

In fact, it is a very great challenge to succeed our entire illustrious line of presidents, each of whom has led the organization to a still higher level of development. I can only hope that this pattern may continue.

Of course, we have a splendid Board of Directors who will approve or disapprove my suggestions and guide me with their good judgment, which is fortunate. I am happy also that I shall have such an efficient Executive Secretary-Treasurer and such a competent President-Elect to walk by my side. I shall be most grateful for assistance from all of these people.

I have been exploring IRA needs all during this year. As I have traveled around the United States and Canada talking to IRA groups, I have had opportunities to speak with many individuals. In all of these contacts I have asked, "What would you like IRA to do for you? How can IRA serve you to the best advantage during the year ahead?"

One suggestion which recurred again

and again was "Give more practical help to classroom teachers in the way of printed materials. Why don't you get out some service pamphlets such as NCTE, ACEI, ASCD and some of the other organizations provide?

Our intentions have been good in this respect. Every year the publication committee recommends the publication of packets or pamphlets or something of the sort but somehow the recommendations just don't get into effect. This year I have been trying to think what we could do to get some helpful service publications out quickly and into the hands of our membership who need them and are begging for them.

This is the plan that I recommended to the Board: have three small conferences, one at college and adult level, one at high school level and one at elementary level at which five or six of the top authorities in the country at the particular level concerned would be invited to present carefully planned papers and to engage in discussion concerning each other's papers. The discussions would be taken down by a court stenographer and immediately following the conference at each level, both the papers in their entirety and the discussions would be edited, published and made available to the membership. The Board and the Assembly approved this recommendation. You may expect some service bulletins to be forthcoming in the immediate months ahead.

"Why don't we have more issues of *The Reading Teacher* each year? "We have six issues while the others have ten. Why can't we have more?" These also were questions frequently asked. Believing that our members would be willing to pay an additional 50 cents in membership dues in order to have eight issues instead of six, I made a recommendation to this effect and it was passed by the Board and Assembly. So you may expect a 50-cent raise in dues not only because of increased numbers of issues per year of our journal but because of other rising costs of the organization. The dues will be $4.00 instead of $3.50 which is commensurate with the dues for other similar organizations and you will receive eight issues of *The Reading Teacher* beginning in September.

Another need frequently expressed to me by IRA members was that of giving wider recognition to deserving people. Some have said to me, "You have to be in the 'inner circle' of IRA or know someone in the 'inner circle' in order to be invited to participate in program or committee activities." This just isn't true. It never has been true. However, as our organization grows, I think we need some medium for discovering new loyal IRA people who are competent in making contributions. We must always make prominent use of our outstanding authorities in the field. They, of course, are our backbone. At the same time, the vitality of IRA in the years ahead will depend upon new leadership. It is the responsibility of IRA to do everything possible to recognize and help develop potential leadership in the field and at the same time our activities will be richer because of their contributions. For this reason, you found a form in your registration envelope on which I have asked you to name your favorite contributors on past and present programs and to give me new names of competent people who can make contributions and who are deserving of our recognition. Please hand these in or send them in immediately if you haven't already done so. I can't promise to make use of every person named, but I'll have them before me when planning the program and will suggest that Dr. Clymer make use of as many of the names as possible in implementing next year's program.

Now a word about Philadelphia and the setting of our 1964 convention. Philadelphia is noted not only for its historical background but for the hospitality of its people, and we are fortunate in having two outstanding local people as co-chairmen of local arrangements—Mrs. Rosemary Wilson and Dr. Gillet Ketchum. They, in turn, have groups of exceptionally strong local people on committees to help them. We have been working ever since last August and, of course, all local arrangement people will be working very hard throughout the coming year, getting everything in order for a smooth-running convention. All of us are awaiting your visit to Philadelphia with high anticipation.

If you are planning to come to this

convention, and I certainly hope that you are, I should like to give you some advice for immediate application. If you think there is a possibility of getting some financial help from your school system or college on your expenses, get your request in right now. School and college budgets for the ensuing year are made during the spring months and usually go into effect July 1st. Most budgets provide a small cushion for extras but that cushion is usually entirely depleted by March or April. Get your request in now so that it can be written into the budget, or so that a part of the cushion at least can be earmarked for your travel expenses a year hence.

If you have a contribution that you would like to make on the program, let me know about that also at this time. Names will go on the program during the month of June and the entire program will be very well firmed up during July and August. So don't wait until the winter months to make your wishes known. The only chance of our being able to place you on a program later on will be in case someone else who is invited, accepts and finds that he is unable to come. It is better to have your name written into the program during the planning period which will take place largely in June.

We who are responsible for programing and local arrangements have to plan months ahead of time for our very large IRA conventions, and it is to the advantage of you who come if you, too, will do some long-time planning.

Now I should like to talk more directly about the Convention program itself in the year ahead. But first let me say that this current year is the first year that a President-Elect has implemented an IRA program. This is a perfectly legal arrangement according to the by-laws but it had never been done before. This year Dr. Botel designed the program as a good president should and at his request I executed it. When you attend a program such as we are enjoying here in Miami, it is difficult to realize all of the background effort that has gone into it. I spent by far the greater part of my time from last July 1st up to the opening day of this Convention living with this program and it was the most difficult job that I have ever done. But I am glad indeed, now, that I had this experience. It afforded many advantages.

For one thing, there were light spots that offered me moments of amusement. There was the lady who lived in far distant parts whom I invited to be on the program and who sent a telegram in reply. A girl at Western Union called, saying she had a telegram for me. I asked her to read it and this is what she read: "Cannot come unless Ira defrays cost of trip. Will Ira pay expenses?" I smiled to myself and thanked her, but I suppose, wishing to send a message in return, she continued, "Do you want to send a message back telling her that Ira will pay the expenses?" And of course I replied, "No, I'm sure Ira won't pay the expenses. I'll have to write a letter of explanation." And the Western Union operator hung up, thinking, I suspect, that Ira was a parsimonious old gentleman.

Amusing moments like this were refreshing but there were more substantial values. One accrued from my contact with so many wonderful people. I came to know large numbers of you whom I hadn't known before and I was impressed with the splendid spirit shown by sequence chairmen and program participants. I was warmed by the graciousness of many of your responses in regard to changes in program, and with your repeated offerings of willingness to help in any way. I found that IRA people were very wonderful people, indeed, to work with. Pleasant contact with IRA members was one of the most rewarding experiences during the strenuous program implementation process.

A third value that resulted from my work with the program, and this is the one that leads directly into the year ahead, resides in the ideas about IRA Convention programs which came to me and which never would have occurred to me if I had not worked so closely with this program. I can see why it is customary in other organizations to have the President-Elect carry out the current program. He needs that experience as a preparation for planning his own program for the next year.

Out of my program experience this year, several questions arose. One of them was "Why do we have organized sequences in terms of grade levels—elementary grades, high school, college and adult?" This is the pattern we have used from the beginning. I think it is time to make a departure. The fundamental aspects of reading are continuous. They run through all levels. Reading in the Content Subjects is important from elementary grades through college, so is the subject of Lifetime Reading Habits, so is Research, and so is Clinical Reading Work, etc. There is no content in the title heading "Elementary Grades," "High School," and so on. When we organize by grade labels, it is necessary to pull topics from all of the functional strands of reading and end up with a combination under each grade level heading. Next year I plan to omit grade level sequences as such, and organize by functional strands only, providing for grade differentiations within each strand. For example, under Reading in the Content Subjects, we'll have one section devoted to the elementary grades, one to junior high, one to senior high and one to college and adult level. This organization will be followed in all of the functional strands. If a person is interested particularly in reading in the content subjects at all levels, he will stay with the meetings within that strand for the two days. If he is interested in this strand only at senior high school level, he will attend the meeting at that level only, then will go to the high school meeting in other strands during the rest of the time.

Another question which arose in my mind very frequently was "Is it desirable to have the predominant format of our meetings one in which one speaker holds forth for a long period of time and is accompanied by a chairman and discussants who have very little time to express themselves, personally?" We had several departures from this plan this year and have had in years past, but by far the most of our meetings perenially are organized in this pattern. In working closely with the program this year, I was in many cases chagrined to ask a person who had done a wonderful piece of research, or had had some other type of rich reading experience, to be a discussant for another's talk, with little or no opportunity to make his own contribution. It would be fairer to such people and our program would be enriched, it seems to me, if there were more time for all people on a given program to share their personal experiences and viewpoints. So I should like to try next year having many panels in which panel members have equal time for presentations, followed by discussions among themselves and from the floor, and fewer programs in which one speaker gives a full hour's talk with little time for the chairman and discussants to share their own experiences with us.

Of course there will be exceptions to panel format in cases of distinguished foreign speakers, directors of grant-supported research studies, famous linguists, etc. We will need strong chairmen and discussants for some of these. Then, too, there will be exceptions when it comes to our senior reading authorities. You will want to spend an entire meeting with some of them, and you and teachers in the public schools of the Philadelphia area will have an opportunity to do that on Saturday morning when each of several of these senior authorities will be given a room all to himself in which he will talk on his latest enthusiasm and answer your questions. You may bask in the wisdom of your chosen senior authority for a two-hour meeting, if you so desire.

One more change in the structure of the program which occurred to me was that there were several people this year who had contributions to make which did not fall under any of the sequence headings. I hope we can make allowance for this next year by having a series of non-sequence meetings which will permit contributions outside of sequence topics.

Now as an introduction to discussing the *content* of the program, I should like again to go back to a mention of suggestions given to me by IRA members during the course of this year. Again and again they have said to me, "Be *practical*. Give lots of *practical* help to teachers in the program as well as in publications." Since the main excuse for my existence during many years has been to help teachers in their actual classroom practices in reading, I would have done this anyhow but the intention was reinforced by these many requests. As I see it, the only way in which we can raise the level of reading instruction in America and world-wide is by helping teachers to apply the theory that we are talking about. They are the ones that are out on the firing line, teaching the children. They are the ones with whom we should work shoulder to shoulder, helping them to develop better practices. We should give them strong assistance in translating theory—both tested and untested—into their classroom practices.

I had an interesting experience not too long ago which had deep significance for me in regard to all of our IRA activities in the year ahead. I gave an after-dinner talk in Nebraska one evening and was due to give the opening talk at a Conference in Kansas the next morning. The only way in which I could make connections was to take a cross-country bus. Just after crossing the border of Kansas, a woman got on the bus and sat down with me. "Are you going to the Teachers' Institute?" she asked. "Yes," I replied. "Are you?" "Yes, I'm going," she answered apathetically. I continued, "It looks like a good program, don't you think?" "No," she answered. "I won't get a thing out of it. I'm just going as a professional duty." "Why won't you get anything out of it?" I inquired. "Well, because they have some college professors talking. They never tell a teacher anything practical." I was quite sure then she had never heard our leading college professors in reading talk, because I have known of many teachers traveling miles just to hear and see them. But anyhow as we traveled over the plains of Kansas in the darkness of the night, I listened to a long discourse on the inadequacies of college professors as speakers at teachers' meetings.

As we were nearing our destination, my seatmate startled me by asking suddenly, "By the way, what grade do you teach?" As soon as I could gather my wits together, I replied, "Oh, all of them." To this my friend sympathetically responded "Oh, you poor thing. You must teach in one of those one-room rural schools."

I didn't want to embarrass her next morning and so I thought it was about time that I revealed myself. At this point I told her that I was a professor and that I would be giving the first talk on the program. Then I hastened to thank her for telling me so frankly how she felt about professors, and assured her that she had been most helpful to me. We shook hands and laughed and said good-night.

The next morning I found my seatmate sitting in the auditorium on a front seat and smiling up at me on the platform. I thought to myself, "I must be practical if ever I have been practical in my life." So I devoted the first half hour of my talk to theory, and the second half hour to descriptions of practices in which teachers could apply the theory.

There were other items on the forenoon program, followed by a luncheon held in a gymnasium with groups of 50 teachers seated at long tables. After luncheon, one teacher came up to me and said a very significant thing, so significant that I am using it as a guiding slogan for all of our IRA activities in the year ahead. At first it was just chatter—that teachers at her table had been talking about my speech and they were so glad to get so many practical suggestions—and then this is the very significant thing she said in a beautifully phrased, artistically balanced sentence, deep in import: "We respected you for your theory. We loved you for your practice."

At that moment the IRA slogan for 1963-64 was born. I do hope that throughout the year you will respect us for our theory and love us for our practice. And this brings me to the point of telling you more about the nature of the Convention program which I am planning for next spring.

The theme of the conference will be something like this: "Reading Theory Applied to Classroom Practice" and each meeting in several sequences will consist of an equal balance of discussion on theory and a teacher actually teaching students, showing an application of the theory discussed. Each discussion of theory or new plan at each level will be followed by a practical demonstration with children—as many demonstrations as there are theoretic discussions of the functional strands of reading so that you may see theory *truly* applied to practice.

Not all sequences, of course, will be accompanied by demonstrations. For those not interested in immediate applications of theory to classroom practice, there will be programs which I trust will meet their interests. For example, there will be a research sequence—not dealing with studies which belong under other sequence topics—research studies should be reported in all of the meetings as related to the topic under discussion. But for those engaging in the higher types of research, for example, there will be meetings on such needed topics as, "Improving Designs for Reading Research," "New Statistical Techniques," Hawthorne and Placebo effects, etc. And for those interested in the psychology of reading, there will be meetings on such topics as motivation, learning theory, etc. Those interested in vision will have a meeting on developmental stages of vision in reading. So everyone won't have to attend programs concerned with applications to classroom practice. Other interests will also be represented.

There will be some innovations in sequence topics; for example, there will be an entire sequence on the uses and abuses of basal reading materials, and a whole sequence on individualized instruction. I think it is a responsibility of IRA to recognize and provide substantial help both to teachers who are using basal reading materials and to those who are teaching by the individualized plan. The majority are still using basal readers. Many could use them more effectually than they now are doing. Increasing numbers are using the individualized plan and they would like some help, also. Therefore, there will be an entire sequence devoted to each of these plans of instruction.

There will be an entire sequence at all levels on teaching reading to underprivileged children. This, I believe, is one of our most urgent and widespread problems in reading, and one with which IRA should come to grips. There will be several other innovations in sequence topics which I haven't time to mention.

As for general meetings, I am hoping to give reading people something very extraordinary. For one thing, I am going to have the audacity to invite John Fitzgerald Kennedy to give a speech to us, and if he turns me down, I'll invite Colonel John Glenn, or Major L. Gordon Cooper, Jr., and if both of them refuse I'll keep on trying to hitch IRA's wagon to a star—and if we fail to reach a star, we shall be doing no less well at least than the space explorers today.

I haven't had time as yet to read the program evaluations which you handed in. I shall, however, study these carefully and I will modify the plans I have just sketched out if your notes indicate ways in which the program would be more beneficial to you. In addition, I would appreciate having you write a little note on any scrap of paper at hand giving your reaction to the plans I have outlined this morning, and leave it with people standing at the door to receive it at the end of this forenoon's session. I want most earnestly to know what you desire. Also, please feel free to write to me at any time during the year if you have suggestions that would make our organization more valuable to you.

As I face the year ahead I feel a heavy responsibility to you and to all of our membership. Taking leadership of an organization of the stature of IRA is a serious matter. My meditations are grave and serious. I only hope that I may be able to serve you well. But, anyhow, if you are willing to put up with me, I'd just love to put up with you, and together I hope that we can keep the good ship IRA sailing on triumphantly.

PART II Sequences

A. Reading in the Elementary Grades

1. Organizing Instruction to Prevent Reading Disabilities

EVE MALMQUIST

A LARGE number of research workers have stated, on the basis of their experimental studies, that reading disabilities are very seldom due to only one single cause. It is maintained that the occurrence of special reading disabilities is, in many cases, dependent upon a complex of factors which are intimately interrelated and are frequently difficult to separate.[1] In this connection it has been asserted that, in the majority of cases of special reading defects, there are good prospects of exerting an influence in a positive direction. At times this may be done to a very considerable extent. At any rate, reading disabilities are considered more remediable than is indicated by the fateful term "congenital wordblindness" which is still used in medical circles, at least in Europe, in a misleading way.

In our remedial reading classes and reading clinics many teachers are performing excellent work entailing considerable self-sacrifice in attempting to heal the often markedly disharmonious personalities that accompany reading disabilities.

The ideal condition would naturally be, however, to *forestall and prevent* the occurrence of special reading disabilities.

How can this be done?

Improvement of ordinary classroom teaching would, from my point of view, diminish the number of reading disability cases.

Diagnosis of the Child's Developmental Stage When Entering School

One of the necessary conditions for this is that we should be in a position to diagnose satisfactorily a child's qualifications for learning the elementary reading functions before he starts school. Another necessary condition is that it should be made possible for teachers in the beginner's classes to take into consideration the stage of development in different aspects of each pupil from his very first day at school.

Certain demands are made from beginners when they start school. In order to be able to meet these a child should have reached a certain developmental level, a certain minimal degree of maturity and experience. Or to use another term—the child should have reached the stage of readiness for school.

School Readiness a Relative Concept

It should be realized, however, that school readiness is a relative concept and does not imply any absolute, invariably fixed norms. This general and highly composite concept implies a certain level of development not only from an intellectual standpoint, but also as regards bodily, social/ emotional, and motor development. The concept of school readiness should be considered in terms of the requirements of learning and adaptation which the school makes in the first year curriculum for beginners. The age at which children start school is of great importance when determining the requirements for school readiness.

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[1] As for definitions of the concepts reading disabilities and special reading disabilities see Eve Malmquist, *Reading disabilities in the first grade of the elementary school*. Uppsala, Sweden; Almquist and Wiksell, 1958.

Beginning Age, Methods and Material Used in Primary Reading

In my native country, Sweden, the children start school at seven years of age as they do in the other Scandinavian countries; England and U. S. A., as you know, start their children one or two years earlier. This must naturally influence the organization of instruction in school and the aims of primary teaching. It is important to know the number of pupils in a class if you are to decide if the child is ready for school or not. Evidently, other things in the educational situation being equal, the child must have reached a more advanced development stage to succeed in reading in a class of 36 pupils than in a class of 12 or 13 pupils.

Furthermore, these requirements of school readiness will depend, e.g., on the competence and experience of the teachers and the nature of the instructional material, and on the methods used in reading.

The extremely significant work of laying the first foundation in learning to read, write, and count is given prominent importance during the first years of school. Consequently it is natural that an attempt is made to differentiate from the general concepts of school readiness those factors which are of special significance for each of these subjects, and also to determine the possible existence of specific maturity factors of these subjects. The great majority of the investigations of this kind deal with the problem of reading readiness.

Some Reading Readiness Factors and How to Evaluate Readiness for Beginning Reading

I will briefly mention some factors which are to be taken into consideration when deciding if a child is to be considered ready for school and also how to evaluate readiness for beginning reading: (1) Physical development. Especially important is that some modern tests of vision and hearing are included in the testing program together with a general medical examination; (2) Visual perception; (3) Auditory perception; (4) Intelligence; (5) Language development; (6) Emotional and social maturity; (7) Previous experiences, background concepts and relevant knowledge of letters, and reading ability.

Before the beginning of the first grade every child ought to be given some intelligence test and a battery of reading readiness tests.

The predictive value of the reading readiness investigations may be increased by using informal teacher observations and ratings of those variables concerned and some informational data about the child's preschool development gathered from kindergarten teachers and parents.

An appropriate use of the results of these tests, ratings, and interviews may be of considerable help for the teacher in striving to discover the specific needs of individual children. Even if the majority of children might be ready to be taught reading when they start school, there are always some who, for different reasons, have not reached the desired reading readiness level. It is considered unrealistic to expect that these children will make normal progress in reading. Whatever the reasons are for their lack of readiness the school must let them get a calm and cautious start in reading. Otherwise, these children run a big risk of becoming "failures" and of getting a lifelong dislike of reading. Before the regular teaching of reading starts, children must get the opportunity to go through a good reading readiness program suited to their special shortcomings learned from reading readiness investigations.

Individual Differences Between and Within Children

Children of the same chronological age differ widely in capacity to learn, intelligence, background experiences, and all kinds of personality traits. Research workers all over the world are in agreement on this. The need of organizing instruction to provide for these needs is therefore evident and urgent.

My own investigations of first grade children in Sweden discovered a range from four years and eleven months to eleven years and eight months in mental age, while differences between the children's chronological ages were very small.

The deviation within the same class of other variables is equally extensive.[2]

It must be wrong under such circumstances to teach all children on the assumption that all need the same teaching. Most teachers recognize these great differences *between* children and *within* children as to various capacities, background experiences, personality traits, etc. But nevertheless they often, at least in my home country, seem to strive intensively to get all the pupils in the class up to established norms. This main goal of the teachers is necessarily of little satisfaction and stimulation for the bright pupils and too frustrating and unrealistic for the very slow ones in the class. More and more teachers therefore try to find a solution by letting children on about the same reading level form separate working groups during a minor or greater part of the time which is assigned to reading exercises.

Grouping Procedures When Teaching Reading in the Elementary Grades

1. There are still, however, many teachers who keep all the children in the class together as one large group. All children use the same kind of basic reader at the same time and at the same speed, fixed by the teacher, during the instructional periods of reading. Neither the fast learners nor the slow learners will profit from a constant classroom organization like this.

2. In order to make the teaching of reading in the elementary grades more efficient and adjusted to the various needs of the children some kind of grouping is recommended. As I understand, some kind of three-group system is at present very commonly used in the U. S. A. To each group children of about the same learning ability are assigned.

3. Much enthusiasm has been expressed by some researchers and teachers for a method involving a highly individualized approach in teaching reading. Each child gets a book or some other kind of reading material adapted to his learning level and his interests. Each child is self-active, working intensively by himself. The teacher circulates around the room and tries to help anyone who wants help or the child who needs special assistance.

Limits of the Usability of Individualized Reading Instruction in the First Grade

This latter method seems to be an ideal one. But in practical reality we have found it very hard to get it to function. In the first grade many children, at least in my country, seem to be too immature to be able to do independent work for as long periods as is desired, if the teacher is to teach other children individually.

Each child in the beginning stages of reading needs, almost continuously, some kind of guidance by the teacher.

As the reading ability of the children increases there will be better possibilities for successful use of highly individualized reading instruction. There are also other limits for the efficient use of this method, noted in my country: too many children in the classroom (in Sweden maximum 25 in the elementary grades) and shortage of reading materials suited for the great variety of reading levels in any classroom.

In Sweden the teachers are nevertheless striving to individualize instruction. But they do it in connection with grouping procedures.

A Four-Group System Commonly Used in Sweden

According to a recently passed Education Act in Sweden (1962) the number of pupils in the elementary grades (1-3) shall not exceed 25 (formerly the maximum number was 30 pupils).

In a Swedish first grade the pupils have to attend classes for 20 hours a week. If the number of pupils in the class is above 15, the class is split. This means that the teacher teaches groups of not more than 13 pupils at a time and often the class ranges from eight to ten pupils. Each half of the class is commonly split into two groups, so that in all we have four groups of the class. But we don't like to have these groups within the class halves fixed for any kind of reading instruction. Flexible grouping is used to achieve different teaching aims.

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[2] Eve Malmquist, *Barnens kunskaper och färdigheter vid skilgangens början* (Children's knowledge and readiness for beginning school). Skolöverstyrelsen, Sweden: Kungl, 1961.

Another essential prerequisite for good teaching to prevent reading disabilities is that reading material will be found readily available. If we are not able to meet a variety of individual needs and interests in this respect, we are apt to fail to reach our goal. There ought to be in each classroom a rich collection of good books on various levels of difficulty with a wide range of interests for use in school or for recreational reading at home. An abundance of supplementary books and reading materials must also be available in the school library and the public library in the neighborhood.

Although we are offering good programs we still, nevertheless, find cases of reading disability. These need more individual help than the classroom teacher is able to give. For these children there ought to be special assistance either in a reading clinic or in a remedial reading class as early as possible.

Summary

From my point of view, in a well organized reading program the teacher should make use of more than one way of organizing the class for reading instruction. A combination of different procedures—where there is also a place for whole-class teaching—will be a more realistic approach to organizing reading instruction than the exclusive use of either whole-class reading, group reading, or individualized reading.

The teacher must constantly watch for possible reading problems as they arise. This is one of the teacher's important responsibilities. For a modern teacher, adequately trained for her work, the diagnostic approach during every lesson is quite natural. In order to be able to prevent reading disabilities, the teacher has to use all kinds of available diagnostic devices not only as a starting point for her teaching of beginning reading but also for continuous use as an integrated part of all the reading programs. Informal tests, objective tests, records of the progress of every individual child in various areas of reading as well as in other areas of personality development are to be used. Integration of language arts is desirable.

An ideal method of teaching reading does not exist. The good teacher tries to select methods and procedures best suited to each individual child in learning to read.

2. New Approaches to Reading for Young Children

WARREN G. CUTTS

Reading instruction is in a state of ferment, and we are probably too close to the current scene to separate trends from fads. And yet a critical analysis of reading today discloses that there are at least three major influences at work.

The first is a rising tide to introduce reading instruction earlier, to teach reading faster. This influence is probably an outgrowth of our concern for space supremacy and our alarm over Russia's technological advances.

The second, a longing for the good old days, has always been with us in one form or another. It is reactionary in nature and is at the present time being led by the Basic Educationists, who are striving to eliminate what they regard as frills in American schools.

The third, and probably the most important from my point of view, is a reexamination of reading instruction and a search for better methods of teaching reading on the part of professional educators.

Reading for Kindergartners

One of the fastest growing trends I have observed across the nation is that of introducing reading in the kindergarten. There are many who oppose this trend, but the proponents are gathering steam and are finding ready support from parents and lay groups. A recent NEA conference in Washington resulted in a resolution *opposing any formal teaching of reading in the kindergarten.* This, of course, would not preclude such informal activities as experience charts, signs and labels, and storytelling.

More than one fourth of the cities with kindergartens in Mary Austin's field study for the Carnegie Foundation now begin formal reading instruction in the kindergarten.

The fact that some kindergarten teachers are using questionable practices in their fervor to foster reading skills may be inferred from the following remarks recorded by Dr. Austin's assistants: "We sound like broken records for a week, getting the children to learn the 'm' sound" . . . "We don't group for instruction in the kindergarten because we have no seat work to give the other groups" . . . "We have dumped experience and reading charts in most instances in favor of moving into the formal preprimers of the basal program."

Assisted by a U. S. Office of Education research grant, Denver Public Schools in 1960 began a five-year study testing the value of reading instruction in the kindergarten. This research involves more than 8,000 children divided into experimental and control groups.

Although some of the children could read primers and preprimers by the end of kindergarten in 1961, others had made little or no progress. Even so, Denver school officials were willing to state tentatively this winter, after two and a half years of study and observations, that results of the program seem to establish an advantage for children who were taught the elements of beginning reading in kindergarten.

Denver has now launched a city-wide program for five-year-olds which utilizes TV lessons and enlists the aid of parents.

Most extreme of the proponents of an early start in reading has been Omar Khayyam Moore, a Yale sociologist. He has experimented intensively with little children, including his own. Starting with a comparatively permissive, free-response situation, Moore has actually taught three-year-olds to read by means of an electric typewriter. That reading does not remain a game for his subjects is clearly evident to those who have viewed Moore's films. As long as such films are circulated among perceptive viewers, I doubt that his work will ever advance beyond an experimental stage. For the historical record, we should note that others (including myself) have been using the typewriter as an aid to reading instruction for many years.

What Is Reading?

As we proceed from the first to the second major influence, we should examine what is meant by the term *reading*. It is apparent that proponents of a return to the good old days support the most narrow definition of this term.

The clamor is still great among laymen and some educators for a return to the 3-R's and for reinstatement of phonics as *the* method of reading instruction. Although I believe strongly in the value of phonics, I think anyone who would urge a return to phonic methods employed at the turn of the century is either misguided or misinformed.

The narrow view of Basic Educationists is clearly demonstrated in a statement by Charles C. Walcutt, author of *Tomorrow's Illiterates*. Speaking at a conference sponsored by the New York State Education Department, he said (and I paraphrase): "Frankly I don't want my students to do so much thinking when they read. In poetry, for example, it interferes with the meaning."

Can there be any real reading without a searching, inquiring, critical state of mind? To me, *thinking* is an integral *part* of reading. I want my students to read for implications and innuendoes, as well as for clearly stated facts.

Language as Experience

In my opinion, some of the most exciting and refreshing work in reading is taking place in Southern California. In San Diego County, under the direction of R. V. Allen, the language-experience approach is offering new vitality to reading instruction. This approach is completely child-centered; it starts where the child is and with him. Since he is talking and writing about himself and the things that interest him, motivation is ready-made.

In essence, the language-experience approach as viewed by the child may be expressed in this manner: "What I can think about, I can talk about. What I can say, I can write (or someone can write for me). What I can write, I can read. I can read what I can write and what other people write for me to read."

The language-experience approach is more a way of teaching and a manner of working with children than it is a method. It requires imagination and daring on the part of teachers. It also requires smiling acceptance of whatever the child produces, an encouraging word when needed . . . and, unending patience. And, since it is an approach and not a method, there must be provisions for a wide range of reading material, for the acquisition of word attack skills, and for the development and maintenance of a large sight vocabulary. In none of the best classrooms which I visited in San Diego County were teachers relying solely upon the child's creative work for these other essentials to reading growth, but L-E approach was the core around which was built the total reading program.

Herein, I think, lies the major distinction between the L-E approach and what many of us have known for years as experience stories and around which we have built experience records for classroom use. Besides being an individual rather than a class activity, the language-experience approach is central to the total program, whereas experience stories (except in certain remedial work) have been regarded as supplementary activities.

Ultimately, the whole issue of reading instruction must reside with the teacher. A poor teacher will get poor results even with the best methods and materials. A good teacher will get good results regardless of the method or the materials. I honestly believe a good teacher could teach a child to read with nothing more than a Sears, Roebuck catalog.

For the first time since the advent of Dick and Jane, we seem to be approaching a possible breakthrough in the firm grip that basal readers have maintained on the teaching of reading. I have no quarrel with the basal readers as such, except for the excessively inane material and the unrealistic language found at the lower levels; but, I do object most strenuously to teachers and supervisors who think the teacher's guide must be followed slavishly like a recipe book.

The Disadvantaged

The culturally disadvantaged represent an area of great concern for everyone in the field of reading today. Because so many such boys and girls are found in large cities, the great cities are playing a major role in the search for better methods and materials. Detroit in particular has been interested in producing more suitable materials, and Hunter College in New York City recently received a large research grant from the U. S. Office of Education to operate a curriculum study center. Hunter will be producing reading materials designed expressly for the culturally different. Bank Street College of Education in New York is already engaged in a somewhat similar project for the lower grades. The Bank Street books, which utilize the language of children, are scheduled for release in 1965.

Much more needs to be done in meeting the difficult problems common to the culturally disadvantaged. Educators are beginning to realize the futility of treating symptoms and of trying to overcome deep-seated maladjustments and language deficiencies at the high school level. More communities are turning to the primary grades and even the preschool years for workable solutions. They are now aware that language patterns are firmly implanted by the time a child is six years old and that culturally deprived children must have help with language development during their more formative years. Nursery schools, summer camps, and day schools may provide a partial answer.

Some Needed Research

There are several areas in which further research might provide us with more definitive answers concerning reading instruction. These include phonics, grouping, materials, and individualized reading.

Phonics. Phonics has occupied such a prominent place in the public eye and has been the object of so many professional articles that it hardly seems necessary to elaborate on this topic. No qualified reading specialist would, to my knowledge, deny the importance of phonics in word attack. The basic questions appear to be: How much phonics instruction? . . . Of what nature? . . . and, When?

Answers to these questions are going to require much more research and more carefully controlled studies than have been carried out thus far. At present there is a tendency to place more and more phonics material in the first grade, and some schools are even going so far as to use such materials in the kindergarten. The best available research concerning the placement of systematic phonics instruction indicates that for most pupils such work below the second grade should be limited to phonics readiness.

Grouping. Grouping practices have accounted for a large amount of research activity during the past eight years. Apparent success of the Joplin Plan has led to many master's theses and to other studies aimed at determining the merit of cross-grade grouping for reading instruction. While the Joplin approach to instruction always seems to compare favorably with other methods in such studies, there are still many who object to it for a variety of reasons. These include the fact that children are sometimes required to work with pupils most of whom are two or three years younger, plus the fact that it is impossible to integrate the reading lesson with other class activities, such as a unit in social studies.

Materials. The recent research of Ruth Strickland at the University of Indiana has demonstrated that the oral language of children and the language found in basal readers resemble each other only slightly. Dr. Strickland believes that further research is needed and that new materials should be tried out experimentally.

Linguistic scholars are also seeking the development of new materials for reading instruction. They feel that present readers are not based on sound linguistic principles. It is evident from current attempts to produce linguistically sound readers, however, that even the linguists do not get away from the restricted vocabulary that has been the source of so much controversy. For examples of such materials, you may want to have a look at the recently published books by Henry Lee Smith and the Bloomfield-Barnhart materials.

Individualized Reading. Individualized reading programs continue to occupy a great deal of attention on the part of educators. One of the most carefully designed experiments to test the usefulness of this approach has been in progress for several years in Baltimore County, Maryland. New York City schools have been the scene of considerable study concerning individualized reading. There have also been a number of books on individualized reading published during the past several years, which tend to reflect the continuing interest in this subject. Even so, very few school systems have shown any strong inclination to adopt individualized reading as a basic approach. It has been more apt to be one aspect of the total reading program and a means of broadening and enriching existing programs.

Augmented Roman Alphabet

One of the most recent innovations to reach the American scene has been the Augmented Roman Alphabet developed in England by Sir James Pitman. Sir James now refers to this method as I.T.A., an abbreviation for Initial Teaching Alphabet. In brief, Sir James has managed, by adding 19 alphabet characters and eliminating two, to achieve a much closer phoneme-grapheme correspondence. He does not advocate that his system replace the regular alphabet and present spelling except for initial learning; hence, the term I.T.A.

Supporters of the I.T.A. claim that a child can learn to read in just half the time ordinarily required. Personally, I am not convinced by either the presently available data or the documentary films I have seen. I have been corresponding for more than a year with John Downing, who is in charge of the London experimental work, and with Sir James. They report that large numbers of children have now made the transition to regular orthography.

We shall have an opportunity to witness the effectiveness of I.T.A. in this country. Several experimental programs will begin next fall with materials furnished by Sir James. A large-scale experiment is already under way in New York City.

Can Intellectual Development Be Taught?

The factors of intellectual development provide an excellent illustration of an area in which emancipation of thinking will pay immediate dividends. Once freed from the bugaboo of mental age, let us inquire into the real demands on mental maturity and see how they can be met. Nearly 25 years ago, Arthur I. Gates demonstrated that skillful attention to individual pupils and equal attention to good instruction greatly reduced the correlation between mental age and reading success.[1] Perfunctory instruction demands far more of the child than it does of the teacher.

The manipulation of language requires both a background of experience to express and a stock of speech with which to represent it. Even a sensitive measure of mental maturity like the verbal portions of the Binet or the WISC demands preliminary acquaintance with the words described or defined. The kindergarten child grows more from a trip to the playground or the mailbox *which he later talks about* and sees his teacher record and read back to him than he does from drill on making letter forms which do not say anything to him. It is harder for an adult to learn nonsense syllables than it is to remember a poem. Yet the slum child is asked to make sense out of the typically suburban primer with house, yard, and pony.

The impetus of the human child is to express what he sees, hears, handles, or smells. On the one hand, we need to make sure he has the vocabulary, and that he learns to tell about his experiences so that others understand and are interested. Good language usage patterns must be instilled. On the other hand, one kindergarten teacher spent day after day training her children to describe in complete sentences how they hung up their coats and caught their balls. Admittedly, the children who "hanged up" their coats and "catched" their balls needed more mature speech patterns, but is either experience worth communicating time after time to the line waiting behind to repeat the selfsame sentence?

Can Physical Requirements Be Met?

If the intellectual standards for beginning readers are broad, the physical standards may seem more specific. What, the teacher may ask, can she possibly do about the pupil whose visual or auditory capacities are immature? At the risk of sounding critical, the answer may be given that if she even attempts to take the physical demands of reading into account, she will be an outstanding teacher indeed. To tell the truth, little more than lip service is given to physical aspects of readiness in most schools, and most activity in this field is confined to measurement rather than instruction.

Reading as a visual task concerned Robinson and Huelsman,[2] who take the conservative view that at least four essential abilities are: binocular acuity, coordination of the eyes, accommodation, and convergence. Other investigators confirm these findings and, of course, some believe a large variety of visual abilities, trainable or not, are of importance. But, as Spache points out, the usual school screening is based on "a wall chart which measures acuity as if the eyes were used separately, and only at the irrelevant distance of twenty feet."[3]

Visual discrimination implies the functioning of abilities to see similarities and differences which will be applied in word recognition and recall. Frankly, there seems to be some value here in maintaining the "face validity" of training materials. In short, word and letter forms can be used to give practice in both total configuration and detail, with encouragement to discuss and generalize on what is seen. Such methods do not require the teacher to assume that matching geometrical forms is the same as matching letters, and furthermore avoids extraneous vocabulary problems like the naming of an "oblong" or "rectangle"—an activity

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[1] Arthur I. Gates, "The Necessary Mental Age for Beginning Reading," *Elementary School Journal*, 37 (Mar. 1937), pp. 397-408.

[2] Helen M. Robinson and Charles B. Huelsman, "Visual Efficiency and Learning to Read," *Clinical Studies in Reading, II,* Supplementary Educational Monographs, No. 77. Chicago: University of Chicago Press, 1953, pp. 31-63.

[3] George D. Spache, *Toward Better Reading.* Champaign, Ill.: Garrard Publishing Co., 1963, p. 3.

Through the Crystal Ball

What of the future? What can we predict in terms of past history and current trends? My own impression is that we shall see much more research directed toward a better understanding of the *actual reading process*. Much of the past research has been superficial and has dealt with matters which were already common knowledge.

I believe we shall witness new dimensions of learning in relation to classroom construction and arrangement. We should see greater emphasis on the teaching climate, especially with respect to centers of interest and opportunities for independent activity and self-instruction.

We must continue our quest for better methods of teaching reading. I hope we can encourage more carefully planned research to compare various teaching methods. Such studies ought to be conducted on a broad scale and over extended time periods. Meticulous controls should be exercised and detailed records kept, so that replications of the same experimental design might be conducted in similar and varying situations.

In the future, greater use must be made of demonstration centers and of new media in upgrading reading instruction. Teachers' colleges will find it increasingly necessary to shift from a lecture-discussion approach in methods courses to a laboratory-demonstration approach.

A teacher-exchange program between college and classroom teachers is already being used by some of the more forward-looking schools of education, so that the college professor spends every fifth or sixth year working with children. This arrangement brings theory and practice into a working relationship, compelling the methods teacher to keep abreast of latest developments in his field.

As we move forward in reading, we must prepare teachers to be ready for new departures as we retain the best in old approaches. We must strive for flexibility and versatility as we examine reports from action research and experiments. By maintaining an eclectic philosophy, we can select the techniques and approaches that work best for us in a program tailored to the needs of our pupils.

3. Readiness for Beginning Reading

AGATHA TOWNSEND

The introduction of most kindergarten-primary teachers to the concept of reading readiness has long been dominated by child development theories. Consider, for example, the classic statements that a mental age of about six years and six months, probably a chronological age of about six years, the ability to perceive visually and to discriminate among various printed forms, the ability to perform in accordance with accommodation and convergence requirements, to adjust to the right-left sequence, to hear and reproduce different language sounds, the ability to conceive of printed symbols as representing spoken sounds and of spoken sounds in their turn as representing objects, actions, or feelings—that all these requirements must be attained for initial success in reading. In addition, as most first-grade teachers know, there is a pretty strong feeling that the pupil had better be a girl, as there is a good deal of wasted time involved if he is a boy.

Such rigorous standards present a number of difficulties. It can, for instance, be demonstrated that most of them are not sustained experimentally. Children with mental and chronological ages below six have learned to read in many languages. Visual requirements are less stringent if early reading makes more use of distance vision, and so on. But the real problem of overemphasis on developmental factors is that the teacher is led to the conclusion that one of her most effective procedures is to stand by until nature presents her with a more mature organism. If this should sound overdrawn, remember that communities have considered delayed entrance for boys, and that teachers have tried deferring instruction for groups, holding many at readiness or preprimer levels so long, indeed, that much priceless motivation has dissipated. The real problem lies, not in the accuracy or inaccuracy of developmental standards, and certainly much research is still needed in further defining them, but in the indoctrination of the teacher that time, not she herself, is in charge of readiness.

which might be left to the New Arithmetic part of the program. In addition, since the right-left sequence is inherent in reading, though not in geometry, words and phrases are logical referents.

Auditory acuity and discrimination is also neglected, even in schools which attempt to capitalize on their supposed attention to phonics. Without doubt, the complexity of our language and the neurological difficulty of apprehending differences in sound combine to make hearing sound and associating it with visual symbols a task requiring real maturity. The task of the teacher is to see that her exercises are graded so the child does not lose track of the sounds she presents, and so that he becomes more skillful in distinguishing words and phrases—not just isolated sounds. Certain exercises are rendered worse than useless because neither teacher nor pupil fully understands the directions. Other auditory materials are graded according to formal logical rules which take no account whatever of the psychological difficulty. Just because of a conviction that pupils should hear all long vowel sounds, the teacher may spend hours on certain letters, asking the youngster to make discriminations which will still be hard for him when he is a fourth-grader.

No matter what the emphasis on detailed auditory discrimination, the teacher should remember that hearing also implies listening, with concomitants of attention and participation. While many kindergarteners are talkative, cheerful, too many first grades are altogether too quiet! The child must hear his own speech if he is to develop an ear for language; oral reading does not take the place of storytelling, and in fact may inhibit the growth of more complex usage patterns. The simplified reading vocabulary may induce the teacher to neglect oral vocabulary, and some first and second graders actually seem to slow up in word acquisition.[4] Any adult who has studied a foreign language will recall a stage when his very thinking was restricted because he did not have the foreign words with which to express his adult thoughts. Do we run the risk of reducing the child's thought to simple declarative sentences of controlled word content?

Is the Teacher Ready to Teach Reading?

It is more than a turn of phrase to suggest that the teacher's own readiness is at stake in the early part of the reading program. The first step toward control of pupil readiness is its study and recognition. The teacher must be ready to abandon the simple generalizations about age and IQ, and turn instead to a thorough study of each child and his individual advantages and limitations.

For some children, the teacher's most important findings will be in the area of emotionality. We are accustomed to the complex role of emotions in reading problems. The teacher of beginning reading has opportunities, never to be repeated, to avoid these problems by positive action. How much reading failure is invited when the pupil's intense desire to read is thwarted from the very start? This can happen through a program of too little substance, which does not let the child advance quickly enough, or a readiness program which is so dull and repetitive that the child who needs much readiness support simply dissociates himself from it and believes he is already left behind.

Both emotional and intellectual needs differ from group to group. Research has long recognized the maturity differential between boys and girls. Research is now recognizing, also, the fact that many boys who are retarded in reading adopt the point of view that it is a feminine activity, in which success may even be a threat to their masculinity.[5] We need research now to put these two facets of the "boy-problem" together. A glance at the usual basal readers seems to confirm the impression of our pupils—the material is pretty innocuous—not to say prissy. Is the teacher ready to scuttle some of the primers in favor of the fascinating trade books with greater boy-appeal? Is she even ready to experiment along the lines of some of the

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[4] Althea Beery, "Development of Reading Vocabulary and Word Recognition," *Reading in the Elementary School*, 48th Yearbook of the National Society for the Study of Education, Part II. Chicago: University of Chicago Press, 1949, pp. 172-192.

[5] Albert J. Mazurkiewicz, "Social-Cultural Influences and Reading," *Journal of Developmental Reading*, 3 (Summer, 1960), pp. 254-263.

Los Angeles schools now trying separate reading periods for boys?[6]

What teacher does not gladly adjust to the fast learner? Frequently, the kindergarten teacher is faced with a child who has already learned to read. Shall this child be sent on to the first grade forthwith? Is the first-grade teacher ready to meet another good reader and use his delightful ability, leading him into independence as rapidly as he will go, no matter what strictures exist that the first-grader must not go on beyond the 1-2 reader and with something for him to read besides "an alternate basal"?

We need teachers ready to break free of publishers and their elaborate snares. How hard it is to resist a series of four preprimers, each with a different colored workbook, two primers, each with exercises, two first readers and supplements *ad infinitum*. No wonder the teachers say there is too much to be done in the first grade. How much is really supplying needed readiness for the slow group? And how much is nothing more than a classroom convenience, a way of keeping twenty children quiet while six bluebirds are reading?

Original thinking is a lot to ask, whether the thinking is directed toward individual differences among children, selecting among published materials, or organizing the class. But good preparation for reading asks for creativity in all these areas. Perhaps the greatest problem in securing flexibility from the teacher lies in her own feeling of security within the framework of the basal program and her discomforture outside of it. Yet emotional and intellectual readiness demands it, and social needs fairly beg for teacher inventiveness.

If there is any one great new demand, it is for more social awareness in our classrooms. Much early failure in reading, to be sure, comes because of the inevitable conflict of the standardized school expectations of the teacher and the greatly varied expectations of the homes and neighborhoods from which the children come. We talk of the great drive of the first-grader to learn to read at once.[7] But many first-graders come from homes where a book or even a magazine or newspaper is never seen. Our primers reflect behavior and living habits which are an affront to the urban child. No wonder that reading, which should be, of course, an agent of social mobility, as well as an unparalleled inner resource for such children, takes place on a level of unreality which leaves it impotent. This new task may be the hardest of all for the well educated, sensitive teacher, but it is one she must assume if she is to build readiness for success.

4. Developing Interest and Taste in Literature in the Elementary Grades

HELEN HUUS

Why Children Read

Why will children read? For the same reason they will do anything: because they really want to. But what makes them *want* to read becomes a complex question to answer, for the basic motivation of individuals varies greatly. There are at least five good reasons that lead children to read books.

Our Culture Expects It

First of all, in America our prevailing culture, both in and out of school, demands that children learn to read—and then read. In fact, that is why most of them look forward to school, particularly first grade, because now they will at last learn to read.

Children who have pleasant experiences with reading at home will want to read. As they see other people reading, it becomes only natural that they also do. A four-year-old, whose lawyer father was always quoting from his legal journals, surprised his family at a dinner party one evening by asking the guests if they had seen the new article about trucks in the latest *Saturday Evening Post.* When they admitted they had not, he said that after dinner he would be glad to show it to them. So when the time came, he produced the magazine, turned to a big double-page spread containing an ad with two huge trailer-trucks, and proudly showed the guests the "new article" on trucks. Reading? Yes, to him, at his level. "Reading" picture books is only the beginning, however, but with the fancy fare available today, who wouldn't want to read?

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[6] Jo M. Stanchfield in an unpublished paper, "An Analysis of the Effects of Homogeneous Sex Groupings upon the Achievement of Boys in a First-Grade Reading Program," presented at the Sixth Workshop in Reading Research sponsored by The Committee on Diagnostic Reading Tests, Inc., at Boston, Mass., April 9, 1963.

[7] An excellent discussion of the low self-concepts of minority groups is included in the report by Wm. F. Brazziel and Margaret Gordon of "An Experiment in Reading Remediation in a Culturally Disadvantaged School Population of a Southern Junior High School," presented at the Sixth Workshop (op.cit.) and to appear in the *Journal of Negro Education*.

Older children, too, read because it is expected of them, just as mother reads the books required for her Book Club and father keeps up with the *AMA Journal,* the company's house organ, or the "Union News."

So, the first essential in getting children to read, if they do not, is to submerge them in a reading environment where they cannot escape reading. Surround them with good books—and I mean literally—on top of, inside of, underneath. Read yourself, read to them, get parents themselves to read and to children. Then, just try teaching one whole day—perhaps you can last only one period—without reading. You'll see—so will the children!

To Satisfy Curiosity

Another reason why children will read is to satisfy their curiosity. Children by nature are curious. If you are skeptical, follow a three-year-old around for a day and tabulate how many times he asks "What's that?" or "Why?" Unfortunately we adults get too busy to appreciate these active little minds and brush off the questions with a hurried half-answer. This leads children to conclude that asking is a bother, and they better find out for themselves. So by the fourth grade, or so, they have learned so well *not* to ask, that to get them started again often poses a problem for teachers. Books will help satisfy their curiosity, though sometimes perhaps to excess, as in the case of the now-classic story of the boy who returned the library book with the comment that this book told him "more about penguins than he cared to know!"

What can children learn from books? Just about anything from archaeology to zebras, about the world they live in, today and long ago, about how things work, and about interesting experiments.

To Help Solve Problems

That books can help solve problems is a third reason why children will read, for they, too, find in books ideas that help them in learning how to act and in learning how to work with other people. A book that comes to mind first is *The Hundred Dresses* by Eleanor Estes, with pathetic little lonesome Wanda Petronski, who wore the same faded blue dress to school each day but bragged that there were a hundred in the closet at home. Not until she had moved away and the drawings of her hundred dresses won the art contest did the class feel sorry for the way they had treated her.

Older boys and girls alike thrill to the way in which Johnny Tremain finally faces up to his problem of having a maimed hand and becomes a young man with a purpose and a goal. That the story is laid during the American Revolution and has historical events and characters is also interesting and helps children feel that this all could have happened; but the real import of the book is Johnny's growing up.

Helping children adjust to new circumstances—new mothers, adoption, new homes, chronic illness in the family, and other problems of living—can often be done better through a book that preserves the child's privacy, yet gives him courage and suggests a course of action for him. And it is often through story friends that children gain an image of what they would like to be themselves.

For Escape

Children will also read to escape. Quite soon some learn that reading is considered by their parents as a legitimate use of leisure time not to be interrupted for errands and chores, as television is. So they escape work. Others escape into books when it is too rainy to play outdoors, or when they want to prolong the actual turning out of the light at night. Adults escape to evade making decisions, to "kill" time, or to take one's mind away from vexing problems. And often what serves as escape literature for one is serious reading for another.

Children may use fairy stories and fanciful tales as a means of escaping into a world where the villain is always punished and everyone "lives happily ever after." One of the amusing modern fairy tales is *Many Moons* by that master of the whimsical, James Thurber. The Princess Leonore wants the moon, and the King wants to get it for her so she will be well again. But when the Royal Mathematician is asked to get it all he does is list the things he already has done since 1907. But this does not help, and the King summons the Court Jester, who neatly solves the problems by asking the Princess what she thinks. Children are delighted when this underdog of the court turns out to be so clever.

Adventure and mystery stories are often escape literature for children, as are the series books and comic books. But if they read quality books as well, I would not worry. The teacher's job is to see that there are books enough.

For Fun

The most important reason why children *will* read I have left until last. Of course they read for fun! And there are books that provide all sorts of fun, from the hilarity of Dr. Seuss to the gentle glow engendered by Little Bear, Winnie-the-Pooh, Mole in *Wind in the Willows,* or Little Georgie in *Rabbit Hill.*

The lure of books is often their illustrations, and a book like Helen Borten's *Do You See What I See?* helps children understand what lines, shapes, and colors can be and do.

The appeal of sound and rhythm is found both in prose and poetry. Ann Nolan Clark's *In My Mother's House* conveys—through the steadiness of the beat, the repetition, and the simplicity—the stability of the Indian and the security the little girl feels as she describes her Mother's house. The cadence of the prose in James Daugherty's biographies, particularly, I think, in *Abraham Lincoln,* is most fully savored when read aloud.

Enjoyment is composed of many things—appreciation of beauty, the feel of words rolling around one's tongue, the sounds that tumble over one another, the protectiveness of large and able creatures for the small and weak, the buoyant good humor of healthy, happy children, with the added spice of nonsense.

So I maintain that children *will* read, because we expect them to, in order for them to satisfy their own curiosity, to help solve their problems, as an escape, and just for fun. But we must give them good books they can read and a chance to read them!

How to Develop Taste

According to Webster "taste" is defined this way:

> The power of discerning and appreciating fitness, beauty, order, congruity, proportion, symmetry, or whatever constitutes excellence, esp. in the fine arts and belles lettres; critical judgment, discernment, or appreciation.[1]

Elsewhere I have recently reported the research studies that relate to the development of taste, and so I shall not repeat them here.[2] But what I shall do is to suggest ways (based upon the research findings) by which you can help children progress to higher levels as they continue reading.

To begin with, children have what might be called an "indigenous taste." When given a chance to choose, they usually prefer that which is good. A fourth-grade teacher found this out when she collected four versions of *Pinocchio* and put them on the reading table: the comic book, the Walt Disney version, one of the "rewrites," and a standard translation containing the original illustrations by Attilio Mussino. Later, when she asked which one she should read to them, the children immediately wanted the "regular" edition—the version that has made it the classic it has become. They recognized the quality of the detailed descriptions and the development of plot that made the story good.

Although children do have inherent good taste, there is still room for improvement. They must learn to recognize *why* one book is superior to another: what is appropriate and congruent, what has order and beauty, proportion and symmetry as they look at and compare books. But before they can do this, they need first to understand what they read, and here is where the basic reading skills loom so important. Their lack can hamper a child from reading a book he really *needs*. But once he reads it, he then must become involved in the book—really live it with the characters the way many third-graders do as they silently weep when Charlotte, the spider heroine of *Charlotte's Web*, gasps her last breath, or the way older children rocket off into space with Robert Heinlein. Once the reader becomes involved, he is aware of the quality of writing—vivid images, believable characters, a fast-moving plot or at least one that has things happen, a satisfactory ending, and throughout, a basic ethic that recognizes enduring values and moral right. These are little Puritans, these children!

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[1] *Webster's New International Dictionary of the English Language.* Second Edition. Unabridged. Springfield, Mass.: G. & C. Merriam Co. Publishers, 1957, p. 2585.

[2] Helen Huus, "Developing Taste in Literature in the Elementary Grades," *Elementary English,* XXXIX (December, 1962), pp. 781-789; XXXX (January, 1963), pp. 56-67.

Surround Them with Books

The easiest way to improve taste is just to put enough good books where children can find them. And if you are clever and know your children well, you will "plant" those books on their pet interests right where they can find them—the Bronson book on *Turtles* for the budding zoologist; a biography of Byrd or *Mr. Popper's Penguins* for that Antarctic fan; *Children of Odin* for that one who loves adventure stories, and so on. By making such quality books available and by judicious recommendations, you can do much to keep them reading.

Be Enthusiastic Yourself

When teachers get excited over books, it rubs off on the children—even on college students. I regularly find that my students in children's literature read those books I promote, and one term there was a student who waxed eloquent on "ants." Never before nor since have so many students read the "ant books" as they did that term! Nor is it any wonder that a child who knows you have read a book will want to discuss it with you when he finishes it. And so you get an oral book report without even an assignment.

Then there was the sixth-grade boy who could hardly wait to tell me, for I was a rather regular visitor to the class, all about *Atoms and Molecules*, which he said was the best book he had read recently. Fortunately, I also had read it recently, and we could share our ideas; but as I left the room, the teacher shrugged her shoulders and said, "I don't even know what he's talking about." My first thought does not bear repeating in this company, but it seems a pity if teachers cannot (or worse yet, do not want to) understand what even a good elementary pupil can.

Read to Children

Even the most naive student teacher learns quickly that the best way to get the group quiet is to start "Once upon a time . . ." And this fondness for listening to good stories does not stop with the elementary grades. Adults listen to Lynn Fontaine reading "The White Cliffs of Dover," or to Robert Frost or Carl Sandburg or Dylan Thomas or any number of other poets reading their own poems. So read to children regularly, every day, and more than once a day if you can squeeze it in. What you start reading in class they will get from the public library and be finished long before you are, but will savor each chapter none the less the second time they hear it.

Poetry, of course, is meant to be read aloud, and besides, it has the advantage of being varied enough in length to be easily fit into the many little "in-between" periods of the day.

Present Literature Lessons

Plan your lessons so that children learn what makes books good. Spend time on descriptive phrases, idiomatic language, or figures of speech.

Or plan a series of lessons that will relate the books or poems to music and art. In one sixth grade, the teacher used the record "The Glow Worm" with the poems "Fireflies" by Fawcett and "The Firefly" by Elizabeth Madox Roberts.[3] In another class, the teacher played "The Anvil Chorus" from Verdi's *Il Trovatore* and used Rose Bonheur's picture, "The Blacksmith," with Longfellow's poem "The Village Blacksmith."[4] (You can almost date this report from these titles!) Annis Duff reports similar experiences in her book *Bequest of Wings,* which is a description of their family's reading together.[5]

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[3] Fern H. Bowes, Florence Painter, and Vesta Lynn, "Use of Recorded Music to Introduce Literature to Children," *Elementary English Review*, XIX (May, 1942), pp. 178-180.

Build Ladders of Taste

Finally, but not really the last for there are many other good ideas, gradually introduce the child to better and better books. Get the girls to go from *Nancy Drew* to *Misty of Chincoteague,* to *Caddie Woodlawn,* to *The Three Musketeers,* as Dora V. Smith suggests.[6] Or counteract the comics by substituting the bold and exciting Norse myths—like the edition by Sally Benson—and they are well on their way.

Why do children read? Because it serves their needs at the time until the habit becomes so fixed that they feel cheated if they cannot continue. And how do teachers help? By saturating the environment with books, by showing enthusiasm for books themselves, by reading aloud to children, by presenting lessons that focus on the qualities that make books literary or that relate them to the other arts, and by gradually leading children to books of progressively higher quality. Thus is taste developed, and thus do children come into their inheritance.

5. Large Group Reading Instruction

NINA T. FLIERL

Large group reading instruction involving 50 to 300 students within a team organization provides a unique opportunity for strengthening a developmental reading program. It results in the improvement of teaching methods and techniques and the greater insurance of sequentially developed reading lessons. The competence of a gifted teacher in a large group lesson realizes benefits for many children instead of only for those in a particular teacher's classroom. Superior teaching and improved instruction result because of better planning, utilization of the finest teachers in a school system, more use of audio-visual and automated aids, increased attention to listening skills, and the outcomes of a programed approach.

When a teacher embarks on large group instruction, it is almost inevitable that his best teaching will be an outcome. First of all, the teacher is chosen for the large group assignment because of a special talent. Thorough and detailed planning, an absolute necessity in large group instruction, gives all students the finest lesson presentation possible. The teacher, who incorporates a successful teaching experience into what is still an uncharted area, develops new and different techniques. Already today there is an explosion in teaching methods for reading as great as in the field of science. The master teacher and cooperating teachers must be selective in the teaching content and must choose carefully the steps or items which are important enough to be included in the lessons.

The considered use of automated and mechanical aids and visuals is part and parcel of large group instruction. Through their use each step or item in the lesson sequence is assured of its appropriate and timely teaching illustration. Inclusion of art consultant experts is standard practice for teaching teams to help in the construction of drawings, cartoons, maps with overlays, graphs, slides, and other items. Not only does this professional help insure excellent visual aids but in facilitating the production the teacher is encouraged to make maximum use of well-produced visuals to illustrate steps and points in each lesson.

The large group reading lesson with the programing of learning items and with exact directions develops curriculum content in a logical manner. Increased ability in listening skills is a by-product of the lessons. Furthermore the teacher is required to teach each lesson a step at a time with each step continuing from the previous step, and the student learns that he must be ready for each step in the lesson. Students readily adjust to the need for attentiveness to each instructional step or item. Lesson guides to accompany each large group lesson help participating classroom teachers to further student readiness and to correlate instruction with the large group lessons.

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[4] Merrill Bishop, "Appreciation Classes in Sixth and Seventh Grades," *Elementary English Review,* IX (June, 1932), pp. 151-152.

[5] Annis Duff, *Bequest of Wings.* New York: Viking, 1944.

[6] Dora V. Smith, cited in Ruth Strang, Constance M. McCullough and Arthur E. Traxler, *Problems in the Improvement of Reading.* New York: McGraw-Hill Book Company, Inc., 1955, pp. 150-152.

Because of the required careful sequence of learning steps, a programing and teaching-machine philosophy is a necessity in large group instruction. The student's activity insures reinforcement, and his immediate knowledge of the correct response aids reinforcement of learning. The student participates actively with this programed approach to the lessons, with the resultant learning strengthened at each step.

Greater provision for individual differences can be realized with the appropriate use of large group instruction in a team-teaching organization. The traditional grouping organization of the graded school with its concomitant lockstep was firmly entrenched early in the 19th century and has continued since then. It was the reading field which spearheaded the breaking of this lockstep by increasing provision for grouping within the traditional graded classroom organization. The common practice of grouping for reading instruction is now so widespread that children glibly announce, "I'm in the top—or middle—or bottom reading group." While attention is given to individuals who fall outside this range, either at the lower or upper ranges, there is universal agreement that much more is needed in order to fully provide for individual differences.

One of the developments which gave an impetus to large group instruction was television instruction which combined the TV teacher and the classroom teacher into a teaching team. The advent of team-teaching projects in the last decade also brought large group instruction into being. Subsequently, experienced classroom teachers as team members found that some of the reading curriculum could be taught as effectively to a large group as to the traditional grade or the groups within a grade. In fact many felt that there was superior learning on the part of pupils with some of the instruction. Scarcely an area in the developmental reading program now exists that has not been taught in large groups. This includes word analysis, spelling attack, stimulation of reading especially with author interviews and special events, improving comprehension, study skills, and others.

Goodlad has recently said, "This is a historic point in educational history, not because of any one event but because so many things are happening at the same time and a lot of them fit together." This is especially true of large group reading instruction which could only succeed because of three major developments:

1. Refinement and improvement of diagnostic procedures in reading so as to pinpoint particular needs of children
2. More knowledge of and research into the sequential development of language
3. Automated advances including teaching machines, the overhead projector, and similar aids

The key to large group instruction is the placing of children together with a common denominator of needs. Virgil Herrick has said that present day diagnosis makes it possible, first of all to distinguish among categories and skills of reading, secondly to know the varieties of reading materials to achieve these skills, and third to utilize the instructional methods to develop the particular reading skills.

With specific and continuing diagnosis a child can be placed at the proper step in the reading sequence and given the appropriate instruction to take him to the next higher level of competence. If proper diagnosis is possible for one child, then it follows as feasible the combining into large groups those children who have common instructional needs.

Increased attention to the study and research about the sequence of language and in the field of linguistics makes possible the orderly progression by students from one reading level to another. It assures continuity, with no gaps in the reading experience. Today's teachers and administrators are increasingly sure of the goals of reading at each succeeding level.

An infinite number of administrative

arrangements to provide for more flexible grouping of students to meet students' individual needs is possible. Large group instruction may be used for two days each week, and three days may be used for small group and individual help. Or, the large group may be used for the introductory presentation of a unit or a particular story, or for films, for visiting speakers, for pupil reports, or for dramatizations. Small groups may then be used for discussion, review and reinforcement of lesson items, for reteaching, or follow-up activities, and for individual review. Another arrangement allows for the special set of reading skills or study attacks particular to content subjects such as science or social studies to be introduced in large group instruction. Subsequent practice for the specific study skill may be provided in regular class situations. For particular needs such as spelling or increasing reading rate or a comprehension skill, large group classes may be organized with the appropriate follow-up in small groups.

With large group instruction an integral part of the developmental reading program to provide for individual differences, reading grouping needs should point up the planning for automated classrooms. In this setting the large group instruction teacher uses the overhead projector with two screens, closed and open circuit television, filmstrip and slide projector, film projector, recording equipment, and other aids to offer the best possible presentation for each lesson. In addition, this large group teacher has professional help for making visual and audio lesson aids, secretarial assistance, and school time for planning.

The superior teaching and improved resultant learning of large group reading instruction methods and techniques offers some of the solutions to the problem of quantity and quality of reading instruction in American education.

B. Reading in the Secondary School

1. Nature and Scope of Developmental Reading in Secondary Schools

ROBERT KARLIN

> "In the judgment of the Committee, the greatest opportunity for progress in teaching reading during the next decade lies in an intelligent attack on reading problems that arise in the content fields. Satisfactory results can be attained only . . . as teachers from the kindergarten to the university recognize clearly their responsibility. . . ."[1]
>
> ". . . When training in reading skill takes its rightful place in the secondary school program. . . ."[2]

Status of Developmental Reading

These exhortations sound very familiar to anyone who reads the current literature on the teaching of reading in high school. But they were not uttered this year or last year or ten years ago. All were urged upon us more than twenty years ago. Is it possible that we have heard but not listened? Is it possible that most of us continue to acknowledge the value of high school reading programs but fail to act upon them? It would appear so. One of our dedicated colleagues who for years has labored in behalf of secondary reading wrote less than six months ago: "The most discouraging circumstance is that so little has been done to implement sound ideas that were advocated and tried years ago."[3]

Although there have not been any recent nation-wide surveys on the status of reading programs in high school, we do have reports of conditions in scattered areas of the country. There is more reading instruction at the junior high level than at the senior high level. How widespread or significant reading instruction is in grades seven, eight and nine is really not known.

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[1] William S. Gray, "A Decade of Progress," *The Teaching of Reading: A Second Report*, Thirty-sixth Yearbook, Part I, National Society for the Study of Education, Bloomington, Ill.: Public School Publishing Co., 1937, p. 20.

[2] Stella Center and Gladys Persons, *Teaching High School Students to Read*, New York: D. Appleton-Century Co., 1937, p. 140.

[3] Ruth Strang, "Progress in the Teaching of Reading in High School and College," *The Reading Teacher*, XVI (December, 1962), p. [illegible]

What is the state of affairs in areas that have been sampled? McGinnis[4] reported that 61 per cent of 1,029 college freshmen said that their high school teachers did not show them how to improve their reading skills. Less than 10 per cent of 570 secondary teachers claimed to have any training in teaching high school students to read. Simmons[5] who sampled 127 high schools in five states found that only one school claimed a staff member trained as a secondary reading teacher.

The literature contains many descriptions of secondary reading programs throughout the states but these comprise but a very small percentage of the total number of *possible* programs. And many of these leave much to be desired. I have and you too must have personal knowledge of schools which *claim* to offer reading instruction to all who can benefit from it but which have no organized plan in reading. Whatever help is offered comes from isolated efforts of individual teachers.

The time has come to face the facts squarely. Do we believe that students in grades 7-12 need help in improving and extending their reading ability? Do we believe that haphazard efforts to help students in reading fail to meet the requirements of school and society? Do we believe that each teacher can contribute to the reading growth of his students? Do we believe that reading is a major goal of reading instruction? If we do, and I daresay most of us do, then real efforts to implement these beliefs are long overdue.

Scope of Developmental Reading

An examination of the increased demands in reading which are faced by students as they enter secondary schools should underscore the areas which a balanced developmental reading program must cover. They include greater depth of understanding, improved fact-getting techniques, increased ability to organize and remember ideas, increased ability to evaluate what is read, and greater ability to adjust reading habits to different reading situations. Added to these are the attitudes toward books and other media as represented by functional and recreational reading.

Six major areas for which a secondary-school reading program must make provisions are: *comprehension* which includes literal and interpretive understanding, critical evaluation and individual word meanings; *study skills* which include the location, selection, organization, and retention of information, following directions and reading graphic aids; *appreciation* which covers style, form, ideas and imagery; *rate of understanding* which includes varied speeds for reading narrative and expository writing, skimming, and scanning; *interests* which deals with the development and extension of reading for leisure; and *word recognition* which includes structural analysis, phonics and the dictionary.

In the typical developmental reading program, less attention will be paid word recognition than the other reading areas. Most pupils will not require intensive instruction in attacking new words. But some students may be weak in the higher level identification skills such as using the pronounciation key of a dictionary or dividing some words into syllables. It would not be surprising if they were to need some help with phonics too. Inherent in a developmental reading program is the principle of beginning where the students are. We offer instruction where and when it is needed.

It is noteworthy that few reading programs are identical in scope or operation. There are, however, basic conditions which all programs should meet, namely:

1. A good program reaches all the students who can benefit from its offerings.
2. All aspects of reading are covered.
3. All teachers feel some responsibility for reading. Major responsibility is assumed by trained teachers.
4. Instruction in reading is based upon demonstrated needs.
5. Evaluation of the program's effectiveness is continuous.

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[4] Dorothy McGinnis, "The Preparation and Responsibility of Secondary Teachers in the Field of Reading," *The Reading Teacher*, XV (November, 1961), pp. 98-101.

[5] John S. Simmons, "Who Is Responsible? The Need for Qualified Supervision of Reading Programs," *The English Journal*, LII (February, 1963), pp. 86-88, 93.

Establishment of Developmental Reading Programs

There is no set formula that a school may follow in order to establish a reading program. There is, however, a basic ingredient that should be contained in any attempt to organize one. It is the cooperation that is characteristic of some schools' efforts to define the problem and effect a solution. A program is no better than the teachers who administer it. It cannot succeed unless it has the support of those who are responsible for it. Teachers are partners with administrators in operating a school; they must share in any formulation that affects them. A reading program that is imposed upon a faculty is not likely to succeed; it should grow out of a recognition that a need exists and deliberations of how the need may best be met.

A faculty that has analyzed its school's reading needs and carefully studied how to provide for them is bound to conduct a more successful program than one which has not had these same opportunities. Nevertheless, periodic evaluation of the program is a requisite to its continuing success. Even though the practices appear to be justified by the results, they may even become better. A professional faculty is engaged in a never-ending search for knowledge, and its influences are likely to affect the quality of its efforts.

Is it realistic to expect a high school faculty to assume responsibility for the development of an all-school reading program? Some critics do not believe that most high school teachers are sincerely interested in contributing their efforts to such a project and advocate that specialized personnel be brought in to do this job. I have frankly discussed this matter with a number of teachers and have found that most of them were eager to join with others in organizing a reading program even though they had other duties and responsibilities and were uninformed about reading. A few were willing to let the administration tell them what was needed and how to proceed. Interestingly enough, the former set a major condition of participation: That the group's efforts would be accepted by the administration to the extent of sanctioning experimentation with any recommended program and procedures. This sidelight on how teachers view the reception their ideas receive from higher authorities reflects some suspicions groups of teachers have about the realities of so-called democratic school organization and supervision.

Methods and Materials for Teaching Reading

It seems to me that the teaching of reading in high school should have as strong a base as the teaching of reading in elementary school. This is not to say that all elementary school reading instruction is of the highest quality. But high schools, few of which have integrated developmental reading programs, have an opportunity to get such programs underway by establishing them on firm foundations. May I suggest that these foundations rest in the psychology of learning. I have said elsewhere that growth in reading may be achieved via different routes. We know that learning occurs under all kinds of conditions. But our task is to provide a learning climate in which opportunities for *maximum* development is present. Until better constructs become known, I am proposing that we follow generally accepted principles of learning in teaching reading to boys and girls. The implication of this suggestion is that there isn't a single method but that any method be consistent with the principles of learning.

Permit me to briefly state what these principles are:

1. What the learner knows becomes the basis for new learning.
2. New learning is simple and becomes progressively difficult.
3. The goals of the learner are equally if not more important than the goals of the teacher.
4. The learner is able to attain agreed-upon goals.
5. The ability to withstand failure is best obtained through success.
6. Skills are taught in sequence.
7. A structure is provided wherever possible.
8. Meaningful learning replaces rote, isolated learning.

9. Transfer is part of the teaching-learning process.
10. The learner can recognize growth when it occurs.

The translation of these basic principles may be illustrated by the following procedures:

1. Find out what students know and don't know before offering reading instruction. Standardized and informal testing will reveal students' strengths and weaknesses.
2. Try to tie the instructional program in reading to problems which confront the students. Better results may be expected if they feel a need for learning or improving their reading ability than if they are told that they will have to perform some time in the future.
3. Use materials which students can manage without becoming frustrated. Too simple or too difficult materials are unsuitable for instructional purposes.
4. Break down gross skills into smaller ones and teach them in order of difficulty. For example, students learn to identify important ideas and details before they learn to outline. They learn to determine the topic of a paragraph before they identify the key sentence.
5. Use the text and context. For example, introduce new words as they appear in sentences and paragraphs instead of compiling lists of words. Their meaning depends upon other words which surround them.
6. Work with students before asking them to perform. Practice in using reading skills should follow careful guidance.

Additional examples of teaching procedures will be offered as I consider materials of instruction.

The selection and use of materials to teach reading are determined largely by the way in which a school views the reading process and undertakes the establishment of its reading program. A faculty that has not had the opportunity to study the nature of reading and methods of promoting growth in reading is likely to turn toward "canned" instructional programs in the hope that they will provide a solution to its problems.

An increasing amount of materials is available to teachers of reading, and there is no reason why they should not be used. It is unrealistic to require teachers to prepare all their own materials when a good supply is available. Even if teachers were able to create them, other limiting factors would interfere with their production. Trained reading teachers can select from available sources the materials they need and introduce them judiciously. Although some materials are superior to others, it is against their indiscriminate use that objections have mainly been raised.

The aim of the lesson should govern what materials are chosen and how they are used. The text in a practice book may be suitable for teaching a special reading skill but the accompanying exercises may not be particularly helpful. Materials for developing a skill may be scattered throughout a workbook rather than found in one section. A sufficient amount of practice exercises may not be contained in a single source. Teachers must modify, compile and supplement the material in these practice exercises. To these requirements is added the most important one: their introduction must be preceded by instruction.

It is recommended that instruction be provided through the materials for which the students are responsible. The textbooks, supplementary books, magazines and newspapers that students read are excellent vehicles of instruction; selections that are representative of them are suitable also. The teacher must know what he may use and how he may use it in order to achieve his known purposes. If the materials in reading textbooks and workbooks are not suited to the purposes for which the teacher intends them, then perhaps the ways in which they are used may be adapted to other types of materials. Some of these books contain excellent ideas for teaching reading skills; the creative teacher can utilize them to accommodate other materials.

One very worthwhile project which a committee of teachers might undertake is the evaluation, preparation, and compilation of materials for developing specific reading skills. A cooperative effort such as this not only would put into the hands of teachers the materials they need but also free them to study ways of improving their own programs.

We have been exploring the elements of developmental reading programs with the view to providing guidelines for your consideration. Other speakers today and tomorrow will be commenting upon specific aspects of these programs. The ideas contained in these presentations should serve as jumping-off points for further study and evaluation. Planned reading instruction in junior and senior high school is long overdue. Here is a real challenge for us all. Are we ready to accept the challenge? I hope we are.

2. Corrective and Remedial Reading Instruction in the Secondary School

DONNA M. MILLS

Of the many problems that plague all teachers at the secondary level, the one concerning the student who reads below grade level causes the most worry and embarrassment for the student, the teacher, and the school. This is true whether the student is a nonreader, a retarded reader, a reluctant reader, a bright underachiever, or a culturally and socially deprived reader.

The recognition of this problem has caused many school systems to institute correctional and remedial programs. Such programs must include more than the teaching of the basic skills. There must be understanding and appreciation for the person, for his abilities, and disabilities. Rapport in corrective and remedial reading is of primary importance with the student and with his parents.

If parents and other interested lay persons are to have an understanding and appreciation of special reading programs, we in the field of reading must communicate to them that reading success depends not only on the skills of the teachers but also on the ability and on the attitude of the student. Not only must the teacher give, but the student must be able and willing to take and to utilize the help given.

Programs

Remedial reading programs throughout the country are as different as the colors in Joseph's coat. This is probably as it should be, for no two situations are alike. Nor do they remain the same year after year even in a given school.

Some schools expect the classroom teachers to meet the varying needs of students by semihomogeneous grouping. At best this is most difficult. There are several reasons:

1. The English curriculum includes more than reading.
2. The courses of study allow no time for remedial work.
3. The teaching of literature is more appealing to teachers.
4. The college entrance problems are paramount at the eleventh and twelfth grades.
5. The students are reluctant to change their study habits. We, as well as administrators, must recognize these facts.

A second type of program which is used in some schools is one in which provision is made for some special reading instruction in small groups. This provides the opportunity for the basic skills to be retaught and at the same time to follow through with the refinement of those skills as needed by the maturing student. With this type of program it is possible and necessary to teach reading in depth.

Currently, in some schools, team teaching is serving to help the students who need additional instruction in the basic reading skills as well as reading in the content areas. This, of course, requires a reading specialist with good background in the contents areas.

A fourth type of program involves helping the teachers who in turn help the students. This is in-service training. An ideal arrangement would be for the reading specialist to conduct classes for all teachers preceding the opening of school on paid time. The reading specialist is then available during the school year for testing, diagnosing, and consultations. In addition she would teach remedial classes.

And lastly, the Reading Laboratory has become the fast-growing pattern. This program provides for all students of a given year or years to have special reading instruction for a six weeks' period. A 12-week period seems more feasible because gains cannot be clinched in six weeks. Inasmuch as all persons can and should improve, this program helps all students. The material used must be at many levels in order to provide for needs of all students. If programed materials are used, there must be several tracts in order to foster growth in all students, and the full, prescribed program must be used so that all skills are taught.

Help for All Teachers

In order to alleviate the plague, poor reading, the Gary Schools in January, 1956 started, at the elementary level, some special classes for students of average and above-average ability who were retarded and/or reluctant readers. It was a small start with but three teachers on a half-day basis, but like the yeast for bread it has grown so that now every elementary and secondary school has small classes for reading improvement. The secondary program started in September, 1959. One secondary school has a partially equipped laboratory and another is fully equipped.

Recognizing the need for some specific helps for all teachers, the special reading teachers throughout the city had some released time in order to prepare guides and activities. One of these gives general basic reading skills, specific skills, related skills, and multitudes of developmental activities for each skill.

Two years ago material was prepared on vocabulary. Embodied in this is a section on prefixes, suffixes, and Greek and Latin roots. Most of the words were found in the secondary textbooks of all subject areas.

To help classroom teachers, the English Department heads of all secondary schools, working under the direction of the English and Reading consultants, have within the last year prepared a guide for the teaching of basic reading skills in the regular classroom. In this, objectives, content, learning experiences and aids for instruction are given. A section is also devoted to the "how to." This is all good! But, good as it is, the services of specially trained reading teachers are also required to meet the needs of the students because of the wide range of reading achievement and the influx of students from deprived areas.

Help for All Students

In any successful program the screening and diagnosing of students is important. Our referrals are initiated by classroom teachers, counselors, school social workers, administrators, parents, and the students themselves. This is a healthy situation.

Since each human being learns in accordance with his ability and his own unique cultural context, that is, his individual psychological, sociological, and economic situation, it is important to assess the home and school environment at the same time that the intellectual, the physical, the emotional, and the classroom achievements are assessed. Some of this must be subjective. Standardized tests such as the following prove helpful: Nelson-Denny Reading Test,[1] Diagnostic Reading Test,[2] and Iowa Silent Reading Test.[3]

These are not difficult to administer or interpret. Each gives pertinent information on which to base needed instruction. Further information is gained from informal hearing capacity, silent, and oral reading tests.

As well as assessing the reading achievement and the various needs, the intelligence factor must be known. At the elementary level, the Pintner Non-Language Intelligence Test[4] is administered by the special reading teacher, while at the secondary level a study of all intelligence tests given routinely is made. The school psychologist, the school nurse, and the physician become a part of the team for a study of emotional and health problems when needed.

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[1] M. J. Nelson, E. C. Denny and James I. Brown, *Nelson-Denny Reading Tests, Vocabulary-Comprehension-Rate*. Boston: Houghton-Mifflin, 1929-60.

[2] Diagnostic Reading Tests—Survey Section, Committee on Diagnostic Reading Tests. Chicago: Science Research Associates, 1952-61.

[3] H. A. Greene, A. N. Jorgensen and V. H. Kelly, *Iowa Silent Reading Tests—New Edition*. Chicago: World Book Co., 1927-39.

[4] Rudolph Pintner, *Pintner Non-Language General Ability Test, Intermediate Test*. Chicago: World Book Co., 1945.

Certainly one criterion for selection into a special class of this type is "Does the student have a desire to improve his reading?" Rarely do I see a student who says, "No," but when I do, he is deferred for assistance until such time as *he* is ready.

After the selection of students has been made, groups of four to ten are formed. Ideally these should be students with like problems, but this is not always possible. These students relinquish their study hall period two days a week.

According to each student's needs, various materials are used. Although teacher-made materials serve the individual pattern of need most adequately, preparation time prohibits this. Some commercial materials which have been tried and tested are:

1. *Tactics*[5] for basic vocabulary building at the word attack and meaning levels,
2. *The SRA Reading Laboratories*[6] for vocabulary, comprehension, comprehension and rate, listening, and listening-notetaking,
3. *Be A Better Reader*[7] for comprehension, vocabulary, and the study skills in the content areas at various reading levels,
4. *Readers Digest,*[8] Educational Edition and Skill Builders, for comprehension, vocabulary, and rate,
5. *How to Become a Better Reader*[9] for comprehension, vocabulary, and rate,
6. *SRA Better Reading,* Books 1, 2, 3,[10] for comprehension, vocabulary, and rate,
7. Trade Books and Paperbacks for comprehension and rate.

Further improvement in rate is accomplished through the use of the Shadowscope.[11]

Part of the work of the correctionist needs to concern concentration. Students may be lacking in this skill for many reasons, such as,

1. Anxiety and tensions from personal problems
2. Unconcerned parents
3. Unconscious drives
   a. Unwillingness to be or do what some one else wants him to do
   b. Retaliation for parental pressures
4. Loss of feeling of competence in any area because of inability to read
5. Effect of television
   a. The picture aids comprehension
   b. Inertia listening, that is, hearing the sound without hearing the content

One way to improve concentration as well as help to improve reading is through conscientious work in listening such as given in the SRA or EDL matetrials.[12] Listening is needed for learning also for testing because at the secondary level, good or bad, many teachers give oral quizzes. Here listening is of paramount importance.

The reading and understanding of poetry cannot be neglected if there are well-rounded readers. Since poetry is musical and intended to be heard, one method of instigating appreciation and reading of poetry is to read the selection to the students. Follow this by having the students make a quick sketch or illustration of the poem. A discussion of the sketches and points which could not be illustrated should be followed with a rereading by the teacher, then by the students.

Specific Projects

During the past year we have had two projects involving team teaching. The first was in an English class of slow-learning students having IQ's of 59 to 100 and coming from culturally and socially deprived homes, some, bilingual.

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[5] *Tactics in Reading* I. Chicago: Scott, Foresman, 1961.

[6] *SRA Reading Laboratory*. Chicago: Science Research Associates.

[7] Nila Banton Smith, *Be a Better Reader*. Englewood Cliffs, N. J.: Prentice Hall, 1958-61.

[8] *Readers Digest*, Educational Edition. Pleasantville, N. Y.: The Readers Digest Association, Inc.

[9] Paul Witty, *How to Become a Better Reader*. Chicago: Science Research Associates, 1953.

[10] Elizabeth A. Simpson, *SRA Better Reading*, Books 1, 2, and 3. Chicago: Science Research Associates, Inc., 1962.

[11] Shadowscope, Polytechnics, Chicago.

[12] *EDL Listen and Read Tape Series*, Huntington, N. Y.: Educational Developmental Laboratories.

Many have had a history of severe absenteeism. For 14 weeks, four days a week, we worked on the basic reading skills. At the beginning of our enterprise the reading levels of the 33 seventh grade students were from 1.6 to 5.1 years below grade level. At the end of the 14 weeks three students, two of whom were bilingual, were placed in faster moving classes. As a result of our referral and through testing by the school psychologist, seven students were placed in special education classes. One of the seven had made no progress, the others from three to six months. The remaining 23 students gained from eight months to as much as two years.

The current project on a team basis involves a social studies class with practically the same group of students. We are concerned not only with gaining information, but with attitudes, reading and the social studies skills. These students were lacking in critical thinking skills as well as in active purposeful reading-study approach.

At the present time there are as yet no standardized test scores; but the interest, the attitudes, the general class participation and the teacher-made test results show improvement. We know that, though we cannot give the capacity to learn or to read, we can help develop the native capacity with which a student is blessed.

An earlier and satisfying experience involved a science class. Except to do the initial and final testing, the writer was not in the classroom. Rather a period a day was spent by the science teacher and the writer in planning. The purposes were to improve instruction in science reading, to improve study skills, and to improve the giving and taking of several types of tests. Together we planned the following learning activities:

1. Phonics and their use in science reading
2. Vocabulary, spelling and meaning with work on meaning of prefixes, suffixes, and Greek and Latin roots
3. Reading skills in science
4. Preparation of tests

Specific instruction was given in the reading of various patterns of science writing, that is, problem solving, classification, and pictorial material.

This project of 12 weeks' duration was in fact some action research using an experimental group and a control group. While the standardized test results were not conclusive, there were other factors which led to the conclusion that the project was worthwhile. Interest was increased, classwork had more sparkle, spelling was improved, scientific knowledge was enlarged as evidenced by results of the teacher-made tests, and reading skills were improved.

The classroom teacher was enthusiastic. He found it difficult to refrain from using the new techniques with the control class. This was probably one reason for the inconclusive test results. With this type of endeavor not only are the individual students helped at the time, but the teacher is better prepared to help successive groups.

Another project concerned reading of students of average ability in the tenth grade. Two days a week have been set aside for basic instruction using *Design for Good Reading*.[12] This, coupled with instruction for reading in depth through the literature phase of the English curriculum is producing more interested and better readers.

Conclusion

In an effective program for corrective and remedial reading the following are important:

1. Provision for several plans of work
2. A well-trained reading specialist, not only in the basic skills but in subject matter areas
3. Thorough testing
4. Many types of materials
5. Interested, understanding teachers in the classroom and the reading room
6. An informed faculty, student body, and parents
7. Freedom to work experimentally

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[12] Melba Schumacher, George B. Schick and Bernard Schmidt, *Design for Good Reading*, Levels I and II. Chicago: Harcourt, Brace, and World, Inc., 1962.

3. Developing Vocabulary and Comprehension Skills at the Secondary Level with Particular Attention to Motivational Factors

GEORGE SCHICK

On every level of teaching above the middle grades, a very considerable amount of attention has been given during the past ten or 15 years to the problem of increasing students' speed of reading. As a consequence, preponderant emphasis has been placed on the physical aspects of the reading act or upon the statistics of words-per-minute in nearly every discussion of reading instruction, to the ultimate neglect of the importance of vocabulary growth and of the improvement of comprehension skills. Although the exaggeration of speed in the total reading process has been particularly noteworthy in college and adult programs, it is more and more apparent at the secondary school level.

In the pioneer stages of the concept of developmental reading, perhaps this stress on speed and physical factors was almost inevitable, in part because it was so easy and simple to count eye-fixations, regressions, words per minute, and to operate a stopwatch. But stop-watch techniques and exclusive concern for the physiology of reading are clearly not enough, as every thoughtful teacher of reading will agree. Yet speed and facts about the physical eye are not to be ignored—rather they must be relegated to their rightful place in the development of the unique combination of skills that go to make up proficient reading. Improvement in rate is essential to the tasks that reading teachers assume. But speed is but one means to the end desired. Indeed, under present circumstances of the availability of devices and instructional aids, speed would seem to be less important than many other activities pursued in a reading center, partly because it is relatively easy to produce improvement in rate.

So it is high time to be genuinely concerned with some of the other significant facets of the reading problem, namely vocabulary growth and improvement in comprehension skills. But here again it is necessary to recognize at once and fully that many scores of hours have been and are being spent in most high schools yearly on matters of vocabulary achievement and on comprehension of the printed paper. But the tendency seems usually to foster vocabulary growth as an end in itself, to seek to develop improvement in comprehension largely on the basis of high grades alone. Like speed, however, increases in vocabulary and in comprehension are also just means to an end. Seen in true perspective, a high score on a word-recognition test or a comprehension examination is intrinsically of little merit. But consequent improvement in reading ability and understanding is of real significance for the reading teacher. Hence the teacher—and in the best sense, every teacher is a reading teacher, must place the emphasis where it belongs—on ends not means. The goal to be sought is not a high score on a test or a superior mark in the instructor's grade book, or even the successful completion of one or more years of secondary school. The emphasis is rather on *individual achievement,* on the acquisition of skills and knowledge which work for better understanding of what is said and read. To be sure, not all pupils will respond to the motivation of self-improvement, and not all exercises in vocabulary learning or comprehension analysis will bring about manifest achievement of progress toward the goal of reading proficiency. Yet proper motivation would seem to be the answer, and assuredly vocabulary increase and comprehension improvement merely to show a five to 15 point gain are of less significance both to the pupil and the teacher as well than ultimate growth in power of understanding and in reading proficiency. This goal of self-improvement instead of a better grade, of investment in individual achievement, will require explanation, reiteration, and frequent repetition if it is to be fully comprehended. But it offers a reasonable answer to the questions that every pupil is entitled to ask: "*Why* am I given this assignment?—*Why* am I studying vocabulary lists or exercises?—*Why* am I taking all these comprehension quizzes?—What *good* is all this to me?" Surely the high school youth is not too young to accept and be moved by the principles of enlightened self-interest, provided he is enabled fully to understand them.

With the relationship of means-to-end in view, consideration must be given to some specific practices in vocabulary and comprehension improvement.

Vocabulary Growth

In general, the kinds of training useful in promoting vocabulary improvement fall into two categories: the analytical and the contextual approach. Each has its place in a well-rounded and thoroughgoing attack upon the problem of insufficient word-control.

The analytical approach includes the familiar drills in word roots, prefixes and suffixes; word lists for particular areas of knowledge, such as social studies, mathematics, or science; word lists of special interest such as those formed from proper nouns and those of especially interesting origin, development, or derivation. With the abundance of such material to be found in texts and workbooks, professional journals and the publications of dictionary makers, perhaps the mere enumeration of these instructional aids and practices will suffice.[1] Despite their familiarity and frequency of use, however, these exercises are not to be underrated in usefulness. When used in conjunction with appropriate motivational instructions and with recognition of the limitations of any purely analytical approach, they can be most helpful. They add to the pupil's knowledge and reading skills. Nonetheless, they should not be relied uopn entirely. Probably the gravest danger which may result from this sort of training alone is the pupil's assumption that English words have but a single meaning. Another difficulty may arise from the lack of relevancy to the pupil's needs or verbal weaknesses in a particular selection of word-lists, or the remoteness from normal reading circumstances in studying any group of words out of context.

The other means to vocabulary development is the contextual approach. Most simply stated, this presents new words to readers not as isolated phenomena but rather in their natural environment, that is, in sentences and paragraphs of text, where the verbal circumstances will tend to assist the reader in identifying, limiting, or amplifying meaning. By contrast with the analytical procedures already cited, the contextual approach has had very little consideration, or use, or research. At present there is but one college textbook[2] and only a single secondary school series[3] which utilize the undoubted values of a contextual procedure in acquiring new words or fixing the meaning of words already somewhat familiar. Since *Word Clues* is a pioneer in the application of the principles not only of programed learning but especially of contextual clues in vocabulary training, it will no doubt stimulate extensive use, further application of the same principles, and valuable and continued development and research. Indeed, the most promising area of investigation in methods of vocabulary improvement would seem to entail considerable study and research on the ways by which contextual clues may be emphasized to foster growth in word mastery. The challenge to be met is to find the means of giving experience with many new words in context without requiring hours and hours of reading. It is a complex problem but certainly not insoluble.

Growth of Comprehension

If continuing motivation is regarded as helpful in getting students to perform tasks in vocabulary growth and development, it is fully as necessary in promoting advancement in comprehension skills. For today's pupils are tested and retested, examined and quizzed at every turn during their scholastic career. But the first and prime factor to recognize in the use of comprehension checks is that they are not to be merely productive of grades in percentages, like 58 per cent, 72 per cent, or 69 per cent. Instead, they should be looked upon as the means by which pupils learn how to understand better what they read and by which their teachers learn better how to teach and develop depth of perception and comprehension in reading. If pupils can be brought fully to realize that the comprehension quiz is an instrument of learning, a device by which they can perfect their techniques of understanding, then the examination ceases to be a sentence of torture and becomes a tool for promoting maturity of reading.

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[1] The two most general sources of material on vocabulary training are the publications of Edgar Dale and associates: *Bibliography of Vocabulary Studies*, Bureau of Educational Research, Ohio State University, 1949, and the later edition of 1957. Johnson O'Connor's "Vocabulary and Success" (introduction to *English Vocabulary Builder*, Human Engineering Laboratory, Stevens Institute of Technology, Hoboken, N. J.), is a classic in this field; Ernest Thompson, "The 'Master Word' Approach to Vocabulary Training," *Journal of Developmental Reading*, II (Autumn, 1958), pp. 62-66, and Wilfred Funk, *Six Weeks to Words of Power* (New York, 1960), represent two points of view on improving vocabulary.

[2] A. A. DeVitis and J. R. Warner, *Words in Context: A Vocabulary Builder*. New York: Appleton-Century-Crofts, 1961.

[3] Stanford E. Taylor, Helen Frackenpohl, Arthur S. McDonald, and Nancy Joline, *Word Clues*. Huntington, N. Y.: Educational Developmental Laboratories, 1961.

In any detailed approach to the ways of achieving improvement of comprehension, due regard must be given to the elimination of several fundamental misconceptions about the nature of reading comprehension—and they are indeed difficult to eradicate. Some of these false notions are first that comprehending well means getting exactly what was said or written; that, second, a given passage has a series of ideas which the reader's mind absorbs like blotting paper; and, third, that the same passage should and must mean exactly the same to all readers. Yet a moment's careful thought will indicate the absurdity of each of these assumptions. So it is necessary to stamp out these erroneous notions fully, with frequent reminders to pupils of the fallacies that are incorporated in these wrong attitudes.

With these general factors taken care of, the teacher may develop the realization that comprehension is not a constant, but rather that there are many levels or degrees of comprehension, which the skillful reader adapts in accordance with his own purpose in reading the material. Here again motivation—in this instance, the reader's goal or purpose, is of transcendent importance. To make every pupil fully aware of the significance of purpose extensive practice is mandatory, for even the liveliest of immature minds find it difficult to predetermine why reading a particular selection[4] is required. Accordingly the student reader is to be trained carefully with exercise materials in such typical reading situations as getting the main ideas, reading for details in general or specifically for certain directions, skimming the entire passage for a swift impression of the whole, looking for inferences by the author, finding a particular statement or proper name or date, and the like. In each reading session with this practice material the pupil should be made to realize beforehand just why he is going to read the assigned selection; having settled definitely on his own purpose, he may proceed to the reading, adapting degree of concentration as well as speed to the specific task or circumstance. Little or no statistical evidence has been forthcoming on the validity of such practice as this; yet it seems amply safe to conclude that reader's purpose is of vital import. Repeated sessions in exercising his own judgment as to purpose can scarcely help being of tremendous assistance to the student-reader.

Another useful consideration for the improvement of comprehension concerns an analysis of the kinds of questions which customarily appear in comprehension checks. When student-readers become aware of the sort of questions they are likely to encounter—such as those on author's main ideas, on the subordinate ideas used to substantiate or explain principal thoughts, or the inferences to be drawn from the author's statements—then the disturbing features of an examination to test comprehension are gradually dispelled.

These are only a few of the types of analytical exercises which pupils should be required to perform. Still others devolve upon decisions concerning author's purpose, a fruitful approach, or upon extensive consideration of the structure of a given piece of prose. Here the detailed scrutiny will go from small to large elements, beginning with thorough understanding of the sentence as a unit of construction, moving then to paragraph, section or chapter, and finally to the whole passage. To be sure, secondary pupils are regularly asked to examine sentences and paragraphs, but mostly in the past this study seems to have been for the purpose of improving students' writing. But here the thought is to focus attention on the betterment of reading and comprehension through consideration of structural understanding.

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[4] See William G. Perry, "Students' Use and Misuse of Reading Skills; Report to the Faculty," *Harvard Educational Review*, XXIX (Summer, 1959).

Conclusion

With all this wealth of exercise and practice material at hand, thoughtful teachers of reading may safely move from preoccupation with physiological factors like eye movements, regressions, length of fixation and with scores in words-per-minute to the admittedly more subtle and difficult but likewise more significant features of the task of reading improvement, namely, the fostering of growth in vocabulary and comprehension skills. In every instance of this endeavor, close attention to motivational factors would seem to be of the greatest moment. With an understanding of *why* and *how* and *to what ends*, the secondary school pupil may be stimulated to increasingly mature skills as he develops his reading habits.

Sir Francis Bacon's advice, first written in the 1590's, may be most profitably adapted to the tasks here discussed, those of developing vocabulary and comprehension skills. He wrote in his profound little essay, "Of Studies," that "some books are to be tasted, others to be swallowed, and some few to be chewed and digested." So too are high school reading pupils to understand that reading may be performed at different speeds, for different purposes, with different degrees of concentration, for different results.

4. Promoting Independent Reading in the Secondary School

M. JERRY WEISS

Prologue: La Dolce Vita

When I was a child, in the pre-television era, a man was a man for all that he said and thought, not by the coast-to-coast ratings he received.

I thought about many things in those days. Everything I read fed these thoughts. Who could afford to miss the thrilling adventures of the Hardy boys, Captain Marvel, Sergeant York, Bat Man, Knute Rockne, and Buck Rogers?

I read because I found excitement and enjoyment in reading. My parents encouraged me. They weren't frightened by the leagues of clean-minded citizens with their implications of Tarzan and Jane not being married and the possible effects on their chimpanzee Cheeta. Nor did they threaten to take away my copy of Aladdin when someone suggested that the genii in the lamp might well represent a suppressed sexual desire that could play havoc with my external being. They just let me read and play, and watched me swap books with friends.

It was a glorious age of independent reading and play. With our guns and swords in hand, our mother-made capes blowing in the wind, we charged the hills, flew all over our literary-imaginary worlds. We were not birds, not planes; just supermen.

Act I: The Sun Also Rises

Those truly independent reading years were few. Now came the era of academic standards. Teachers told us what to read and when to read. The entire class read the same books at the same time. The entire class, at the given command of EXAMINATION, digested or regurgitated each dissected poem, short story, novel, drama or paragraph from *the* profound texts. No regard was given to what I had read or what reading attitudes and experiences I might bring to any of my classes. THE TEXTS—those dull, listless, lustless passages of science, mathematics, and social studies—were void of the human emotions of conflict and conquest. People were always spoken about; they never spoke. Events had already happened; I was never there. Facts and processes were so; no need for self-discovery. Reading was reduced to the brutal acts of memorization, recitation, examination.

If we failed these, we were given pages of workbooks or questions at the end of the chapter to complete. These reinforced the power of negative thinking. When these activities failed, we were assigned to slower sections or regrouped according to our new general disability level. Interest and motivation hit a new low.

My independent reading was channeled into prescribed reading lists for outside reports which were due the second Friday of every month. These hanky-panky book reports reflected the cool, clean, sterile living of teachers who dedicated themselves to the status quo of ideas and experiences befitting the illiterate group within a given grade on a given ability level of a particular section of homo sapiens. For three years I turned in reports on I MARRIED ADVENTURE and received an A. (Please note: here is *my* scarlet letter.)

Human growth and development stopped or were reduced to multiple choice, true or false, stagnant, stigma scores. We had norms and standards with the normal distribution of deviations and expectancy levels.

As Dickens might say: "It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the spring of hope, it was the winter of despair." In any event, my reading and I suffered.

I, with my love of learning and reading, my once positive attitudes towards books and ideas, my limited creative abilities, fell into dishonor. A decade or so later, research was to rescue me from the bottom quartile of anonymity, and my days of wine and Dewey flourished.

Act II: The Light in the Forest

These experiences as a reader and as a student have taught me that to teach effectively I must know my students, their interests, their abilities, their strengths, their weaknesses. I have learned that each student, through his personal experiences and attitudes, brings to the reading situation a unique self. The most meaningful learning experiences recognize the contributions each reader can make to class assignments. By capitalizing on these interests and abilities, I attempt to help each student to develop in and through his reading experiences.

The most stimulating and challenging method I have found for promoting independent reading, with due recognition of the many levels within a class, is that of "unit" teaching.

Title: Select a topic or problem which is significant to the students and which will appeal to them. The topic is *not* imposed upon them; it grows out of a specific class interest and need. The teacher needs to do much preplanning to make sure there are enough books and references available for students to pursue the topic. Some unit titles might include: "The Wonderful World of Humor;" "Man and Nature;" "Values in Flux."

Initiation: Discussion of movies or television programs might lead to a unit on "The World of Adventure." Film strips, field trips, resource speakers, recordings are just a few of the many ways of stimulating student interest to read further.

Objectives: Ask the students to raise questions which they think must be answered for a thorough understanding of the topic. Questions should have a direct bearing on the subject and should lead to sound conclusions. The teacher should add questions he feels are necessary for developing the unit to the fullest extent.

Assignments: Ask students to volunteer to explore one or more of the questions listed above. Interest groups are then formed. Students and teacher bring materials to class for carrying out the assignment. Each assignment requires reading, writing, speaking, and listening and is designed to make students familiar with all types of reading material. Individual papers or group reports are to be turned in. The papers reflect the students' discussions, findings, and research. Findings are presented orally to the class through a panel discussion, or dramatic readings, or artistic representations (murals, photographs, puppets, etc.)—and comments; or through graphs, charts, diagrams, statistical tables, etc., again with comments. The main purpose of the presentation is to transmit ideas clearly and effectively. Ideas should be carefully supported by facts and examples.

While one group presents its topic, the rest of the class takes notes. Each class member is responsible for the facts and ideas presented. The sharing of information and reading experiences, and the give-and-take which accompanies the process, are valuable learning experiences.

These activities often lead to behavioral changes as well. While students are preparing their reports and projects, they are under constant observation. How do they attack their problems? Do they have initiative, resourcefulness, creativity, dependability? Are their attitudes being changed? Are they finding new interests? What sort of interaction is taking place between and among the students? The teacher, as a resource consultant rather than as an "authority," can focus his attention more closely on problems in learning. Each student, being unique, should feel free to make his contribution to the group. Unless he is interested in the problems and is involved in finding answers, it will be very difficult for him to become a good reader and a critical thinker.

Summation: After all reports are given, the objectives are rechecked and the findings are summarized.

Evaluation: Tests, written reports, oral reports, student notebooks, daily observations of the students, offer valid means of evaluating student growth.

By getting to know each student and by planning thematic units for each class based on a thorough knowledge of the interests and abilities of that specific class, we can provide for the many individual differences within a class and encourage broader and more purposeful independent reading programs.

Act III: Brave New World

We teachers have come to realize the personal nature of reading. We know that effective reading involves much more than the mastery of a set of basic skills.

Certainly we want students to master comprehension and word attack skills, but we also want to develop active readers who assimilate the ideas they discover and learn how to share them with other people, who build new concepts for themselves on the basis of a newly found understanding. Mel Cebulash in Teaneck, N. J., runs a book club at which students discuss current issues and problems as developed in the many books they read. There is real identification here, and Mel has brought a status to reading as he helps students measure the impact of their reading on their lives.

We want critical readers who will weigh different sources, different points of view, and different experiences, who know the difference between fact and opinion and can recognize propaganda devices. Here we can see the necessity for a multitude of reading materials as opposed to a single text. Frank Dippery of Bradford, Pa., has his students rediscover the Westward Movement. To begin such a study, he had the students watch westerns on television and in the movies. He had them read widely so that they could evaluate the accuracy of our mass media.

We also want readers who are selective, who will read variously for many moods and needs. They need the experiences of browsing among books. Frank Crawford of Teaneck, N. J., runs books fairs for parents, teachers, and students. He surrounds them with books and lets them enjoy self-selection, and hopes that they will do so for the rest of their lives. He acquaints teachers and students with such publications as *Studies in the Mass Media* and *Paperbound Books in Print* so that they might know what's available. Austin Fox of Buffalo, N. Y., started a paperback book store. Here students and teachers can browse and choose at their leisure. Teachers capitalize on the availability of such a service and drop names of books and authors that students might find profitable to read.

Furthermore we want students to become sensitive to the nature and values of language. At Defiance, Ohio, we used to ask students to take an abstract word, such as "Beauty." Read widely to see how writers, through the centuries and throughout the world, treat such a subject. The students become sensitive to the individual writer, to his ideas, to his techniques, and to his purposes. In Martinsville, Va., the Board of Education allotted a sum of money to invite writers, including literary critics, to visit classes and to discuss ideas with the students. To be able to participate in such seminars, students were asked to read widely in the works and about the works of the visiting author.

Above all, we want students to find enjoyment in reading. We must realize that students come into our classes with different degrees of readiness, interest, and experience and that teaching must vary accordingly. The range of available material should be broad. It is practically impossible to justify any one book for all students. The paperback revolution has made possible classroom libraries at reasonable cost. John Rouse, formerly of Monmouth Regional High School, told me that his department was given three thousand dollars for paperback books for unit work.

We know that reading instruction is completely successful only when the student has acquired the habit of active continuous reading and can read with ease in all of the subject areas which, by necessity, or choice, he faces.

The reading program is not the product of one teacher, but demands the involvement and resources of the entire faculty on drawing the best possible work out of each student and in helping each student evaluate the impact of reading upon himself.

It is my firm conviction that the old standardized classroom—with its standardized texts, standardized teachers, and standardized students—may provide for educational quantity; but it is the fresh teacher, with a philosophy of experimentation and a genuine love for the individual mind and person who will, ultimately, provide for educational quality.

5. Improving Secondary Reading Through the Content Subjects

WILLIAM K. DURR

In the recent past, many secondary teachers brushed off the responsibility for improving the reading abilities of their students with the comment, "I have too much subject matter to teach; I don't have time to teach reading." Despite our increased knowledge and, consequently, the increased responsibility for helping students master still more and more content, the wise teacher today concludes, "There is so much for my students to learn, I can't afford *not* to teach reading."

Evaluation

We initially direct our reading instruction to the needs of our students and subsequently determine the effectiveness of our techniques through systematic evaluation of their reading abilities. One relatively simple evaluation technique is a diagnostic open book examination. Have your students summarize a brief section of the book with the book open. Then have them turn to another section and relate the information given there to something else, for example, to their own lives. Last, designate several words in the text and have them give definitions for those words which are appropriate for the context in which the words are found.

This procedure will help you determine whether your students can adequately handle the basic text for your course. It will not, however, tell you the level of material which will be appropriate if the text is too difficult. To answer the latter question, construct a series of short paragraphs dealing with the content in your area. These should range from simple to difficult and should include a set of questions for each paragraph. If you will select these directly from content books of varying difficulty levels, you can quickly obtain an estimate of the specific reading materials that you should use with those students who cannot use the grade-level text.

Vocabulary

Your evaluation should provide information about your students which will not only guide your selection of appropriate reading materials but will direct you to the most profitable areas for reading instruction. In most cases, vocabulary will be one of these areas.

The vocabulary problems that a student will most likely encounter in his reading fall into two general categories. First are those words for which the student would have meaning if he heard them but which are unfamiliar to him in print. For example, if someone read the word *catastrophe* to him in context, he might have understanding for it, but, if he sees it for the first time in print he may not have an immediate association between the symbols and the sound he knows as *catastrophe*.

The second category includes the more common vocabulary problems—meaning difficulties. In some cases, these involve words for which the student has built a symbol-meaning association but now he meets the word in a new context with a special, unknown meaning. For example, he may know that *motion* has to do with something changing place and that *letters* are alphabetic characters. Then, suddenly, he is called upon to understand the sentence, "The *motion* is carried," or, "He was a man of *letters*." In such cases, he has to develop additional meanings for words that he already thought he knew.

In other cases, these meaning difficulties involve words which are new in both meaning and pronunciation. For example, the first time he comes to the words *archipelago* or *neutrons* in his reading, he may have no meaning even when someone provides the correct pronunciations.

Students should first receive direct instruction in understanding these types of vocabulary difficulties. For example, say to them, "In this text you may have two kinds of difficulties with the words that you meet." Then discuss the above points with them together with many specific examples selected from your text.

Once the student clearly understands the kinds of vocabulary problems that he may encounter, how can you help him resolve those problems? The final arbitration, of course, rests with the dictionary, but high school students need direct instruction with other aids which precede dictionary use. One of the most important of these is the use of context clues.

Start by asking them, "In what three ways do you use context clues to help you with vocabulary?" They should know, or you should help them to understand, these ways. First, they use context clues to determine the pronunciation of certain words such as *wind* and *separate*. Second, they use context clues to help determine what a word might be when that word is in their meaning vocabulary but not in their sight recognition vocabulary. In the sentence, "The drowning man was pulled to the beach and given artificial *respiration*," context clues can help them with the word *respiration* in this familiar expression. Third, they use context clues with words which are not immediately recognizable in print and for which they would have no meaning even if they knew the correct pronunciation. In the sentence, "The *butterwort* is found generally in the southeastern United States," the word *butterwort* may be completely unknown to them both in sight and sound. Here they look for clues in the remainder of their material which will help them understand the meaning of the term and the correct pronunciation may not be essential.

In addition to context clues, you may have to provide some work in letter-sound associations for your students. This, obviously, is of no value unless the word is in their listening vocabulary. Making the correct letter-sound association and achieving the correct pronunciation of *butterwort* does not help unless we have meaning associated with that pronunciation once we have made it.

The abilities to utilize a dictionary, use context clues, and make appropriate letter-sound associations will all help your students in their independent reading. In addition, assistance with specific words which are most important to your content will increase their mastery of the content. This four-step process should occupy a few minutes from each class period.

First, select from your text the important words which you believe may cause difficulty. Supplement your list with words that your students select as they skim sections of the material looking for words which are not immediately recognizable to them.

Second, develop and fix the association between the printed symbol for the word and its sound. Write the word on the board in context and determine the pronunciation with the students. To fix it, have the students say the word orally and, when necessary, write it several times.

Third, develop meaning for this term as concretely as possible. This may involve an experiment that they perform or it may involve the use of such visual aids as movies, filmstrips, and still pictures. Discussion may be of some value in developing this meaning, but it should be in the most concrete terms that you can creatively devise.

Fourth, to make this word their permanent possession, have frequent, brief reviews. For example, it takes no more than two minutes of your class time to have your students review five words each day. Place these words on the board, pronounce, define, and use them in sentences with your students.

Purpose

After vocabulary, the greatest blocks to effective content reading are difficulties associated with purpose—student purpose for effective reading.

When our instruction centers around the content of a single text, the student needs direct help in establishing purpose in relation to that text. For example, it is never appropriate to tell a student merely to read a certain chapter. We must help him set his purpose for reading. If we want him to draw general conclusions from the material, then we must indicate this purpose before he reads it, preferably by giving him or helping devise questions which require general conclusions. If we want him to read the material for certain kinds of specific details, once again we should point out this purpose and direct him toward those details.

Our two best approaches to purpose with students are through comprehension and rate. We can help them set comprehension in terms of purpose by devoting at least the first one or two class sessions to a general overview of the text. Help students understand its general organization, the unit arrangements, chapter subdivisions, and section and paragraph headings in terms of the purposes they will have as they study the text.

This is an appropriate time to reinforce or introduce students to the "Survey-Question-Read-Recite-Review" system of study which has demonstrated effectiveness for many years. A survey of college freshmen, most of whom are unfamiliar with this technique, indicates that many complete high school without ever being introduced to it. A short book designed for use by the high school student, Francis Robinson's *Effective Reading* which was published by Harper and Row in 1961, is an excellent way to become acquainted with this invaluable study technique which you may, in turn, use with your students.

When you want students to read for the purpose of retaining important general information, one effective technique involves outlining. Here, however, you may have to block off some habits which students have previously developed. The type of outlining which students frequently learn involving main headings, subheadings, sub-subheadings and so on into minute infinity is a most inefficient way to study a single text for general information. Help your students by insisting that one page of major headings and subheadings per chapter is enough. Then give them practice in doing this outlining with the book closed after they have finished reading a chapter.

When the students' purpose is to get a more detailed understanding of the content, other procedures are more efficient. One frequently used technique involves summarizing a brief paragraph or paragraph section by having students try to reword the most important details into a brief telegram. Another is to have students select the main thought of a paragraph and then list, in their own words, all of the facts or details which the author uses to support or elaborate on his main thought. Still a third technique is to have the students reword the paragraph into a formula where idea plus idea plus idea equals main thought.

The second approach to purpose with students is through study and practice in rate flexibility. Few students are mature enough in the elementary grades to develop adequately an understanding of rate flexibility. Some have had a little help in increasing their words per minute in silent reading, but this falls far short of the ability which we should expect the average high school student to attain.

Discuss rate flexibility with them in terms of their own, individual competencies. You may do this concretely through simple, teacher-made exercises which help you evaluate them and help them evaluate their own levels. Duplicate three paragraphs which have been written for students at the fifth, eighth, and eleventh grade levels. Have them read each of these paragraphs for the major ideas and have them time themselves on each as they read. A comparison of each person's time for each paragraph can graphically show his ability to vary rate according to the difficulty of the material.

Additional paragraphs should be used to help them understand rate flexibility according to purpose. Provide two paragraphs of comparable length and difficulty. Have the students read the first to answer general questions and the second to answer questions of detail. Comparing their words per minute on the two paragraphs and their per cent of comprehension on the two kinds of questions will concretely show them their rate flexibility according to purpose.

You can provide activities which will give them practice in varying rate in almost all of the reading assignments that you give. When you make a reading assignment and help set purpose with questions before they read, remind them that they are to read for general ideas and they should read at a rapid rate or that they are to read for details and they should read at a more careful rate.

Concretely show them their progress by individual charts which graphically portray words per minute and per cent of comprehension. Each student should keep his own chart and, at least once each week, have timed practice which permits comparison with his previous rate levels.

Conclusion

The concrete value of reading instruction correlated with the content areas has been amply demonstrated. Your students will not only increase in reading efficiency, they will learn more in your content area when you provide reading instruction in that area. Evaluating their reading abilities and providing direct teaching in vocabulary and reading with purpose will help them attain their highest learning levels.

C. *Means and Ends in College and Adult Reading*

1. Means and Ends in College-Adult Reading

ALBERT J. MAZURKIEWICZ

In recent years we've heard calls from various sources within the profession, to meet the changing needs of the college populations. These challengers have asked questions but given no answers. They do not even hint at possible solutions to problems which have arisen from the greater sophistication in reading skill of entering college freshmen in many states. They give no realistic suggestions to meet or understand the drop-out problem in voluntary, nonfee, college reading programs. They don't suggest what the goals of college reading programs might be and how these might differ from the goals of reading in secondary school programs. When developmental reading *is* defined for college-adult populations, a definition which goes beyond the SQ3R's, organization skills, and vocabulary drills, few answers are given to the problems of preparing staff.

In examining many reading programs at the college-adult levels in the last few years, it would seem that reading at these levels is at a crossroads where one fork leads to oblivion, another to a greater emphasis on smaller college programs and larger adult illiteracy programs, and the third toward programs primarily emphasizing varied programs with adults. The road we're on doesn't permit a U-turn nor a retracing of the route. We can't go back to the heyday, halcyon years, yet few of us seem to be moving past the caution signs at the crossroads. In examining programs as an interested observer, the conclusion that seems most obvious is that most programs seem so static that they might well be considered dead, except for the fact that they are seemingly meeting the reading and/or study needs of fairly small segments of large populations.

Where states have been encouraged to move toward certification requirements for beginning teachers at the secondary level to include a course on reading instruction in secondary school subjects, a lessening of high school student interest in summer programs offered by colleges is beginning to be discerned. Where there has been a mandated or voluntary movement into developmental reading programs at the secondary level, a large drop in registration for summer programs has been noted. High schools have moved into the field with vigor if not with quality and thorough understanding. Where secondary programs have been oriented to meet the needs of the potential college freshman, a degree of difficulty has arisen in college reading centers in finding materials to carry on developmental reading activities since in many cases the former high school senior has been exposed to much of the materials still in use in college programs. Where secondary programs have begun to meet the needs of the potential college student, college programs have begun to flounder. Detectable symptoms include the fact that the staff of such centers seem unchallenged; activities are self-directed to an increasingly large extent; more emphasis on counseling and less on instruction has begun to take root; poorly trained graduate assistants are used to an increasingly large extent to staff programs; etc. While these conditions can be justified in various ways, more often than not the condition is a reflection of the status of a program.

While college enrollments are on the rise, entrance requirements have risen as well. While fewer freshmen have gross reading needs, the number who need instruction continues high. Yet, in Pennsylvania alone, last year two colleges dropped their newly established programs, and one made a decision to terminate its program as of June, 1963. More colleges, caught in the maelstrom of spiraling faculty costs, are examining various courses and programs to eliminate those in which registration is small. Since it is becoming increasingly difficult for some reading centers to justify their continuance on a school-supported basis therefore more centers are offering programs of various kinds on a fee basis and more colleges are buying services from organizations which are geared to provide itinerant instructors.

Since some of the commercial reading service organizations are lacking in responsibility, and cannot be policed, irresponsible advertising claims have misled some public school and college administrators (and faculty) to establish unrealistic goals for programs. When such goals are not met, an onus of dissatisfaction is visited not only upon the instructional group responsible but also on the work of all reading specialists.

Problems abound in the field of college-adult reading. If, as I read the signs, college-adult reading is indeed at a crossroad, the ideas of the speakers of this sequence will be of invaluable aid in establishing, if not a specific route, then at least a plotting of direction.

2. Basic Needs or Veneer?—The Dilemma Faced by College Reading Programs

MARTHA J. MAXWELL

Today as our high schools are turning out more and better qualified college applicants than those who sought admission to our higher institutions a decade ago, colleges are beginning to re-examine their curricular objectives. Private colleges have become vastly more discriminate in the students they select, and in our bulging public universities, "survival of the fittest" has replaced "a four-year loaf" as the watchword. For the student, attaining a college degree has become a serious and highly competitive endeavor.

What will be the effect of rising academic standards on college reading programs? Let us look briefly at the roles and functions that services have traditionally provided and then consider how well such programs can meet current needs.

Historically, college reading programs have evolved to meet the needs of students who are weak in reading skills.

Although the term *developmental* reading is more fashionable than remedial reading as a title, in practice most colleges offering reading services either require or recommend that students scoring in the lowest third of the freshman norms on reading tests enter the reading program.

College reading courses, with few exceptions, have been primarily identified with remedying deficiencies. In other words, most of us in the college reading field have devoted our major efforts to a salvage operation, that of rescuing the below-average student. Our faculty colleagues may view the reading service as necessary because "the high schools have not done their job," or they may be grateful that they have a place to refer students with whom they have neither the time nor the inclination to work. The reading service typically functions as an ancillary department rather than an integral part of the academic community. Lacking a feeling of academic respectability, the attitudes of the reading personnel toward their own functions are frequently either apologetic or defensive.

What happens to a reading service which has been identified with the poor student when college entrance students rise? Until all students achieve perfection, there will always be a bottom third in every class, but can we justify our existence by claiming that these students, who in former years would have been considered adequate readers, now need our help? Under these circumstances, the college administrator might well question whether continuing the reading service is necessary.

Does Speed Reading Training Fill a Need?

Attempts to provide developmental reading services for the average or higher ability college student have usually taken the form of speed reading courses. These attract the student who is looking for a painless panacea for all of his problems—be they due to lack of motivation, disinterest or poor skills. Faced with lengthy reading assignments in his college courses, the student views speed reading as the touch stone of academic success. If he could not read faster, he could get through all that work in less time and with less effort.

Preying on the dilemma of the unconfident reader, commercial superspeed reading programs have been doing a thriving business and not a few college reading programs have come under their sway. Luring the anxious college-bound student or the academically weak with promises of success, these reading instructors have encouraged many unwary young people to develop shallow, superficial reading habits which inevitably spell academic disaster. We have had over a hundred victims of speed reading courses in our program during the past three years. Based on our experiences with these students, I shall describe briefly some of our observations of the dangers inherent in superspeed reading programs.

Diagnostic or screening tests are not used in many commercial rapid reading courses. Selection appears to be based only on the prospective student's willingness to pay the fee. Unless an individual has developed adequate vocabulary comprehension and critical reading skills, practice in speed reading results in his mastering the skills of flipping pages rapidly and moving his eyes vertically down the page. Neither of these skills has ever been demonstrated to relate to college success. A number of these rapid reading "graduates" whom we have tested read with great speed, but their comprehension scores were lower than chance.

Similarly, systematic testing for evaluating progress is not used in some courses. The rationale frequently given by these instructors is that standardized tests do not measure the skills that they are teaching, so they discourage their students from taking tests. Yet college students are expected to do well on standardized tests whose value in predicting academic success has been amply proved.

High-pressure advertisements implying that if you but learn the "secret method," you will achieve your reading goals attract the insecure. No one method has ever been demonstrated to be infallible in any educational area, much less in the reading field where there are many relatively effective techniques. Just as students' abilities, motivations and needs differ, so do the techniques or methods that will be most beneficial for a given individual. Students who fail to achieve their expected goals in speed courses are left feeling more inadequate than ever. They have been told that it was they who failed, not the method.

Demonstrations by exceptional young people who read at jet-propelled speed are used as a "come-on" to draw new students into the course. The demonstrators are bright, verbal, highly motivated people who were able readers before they took the course. Demonstrations of this sort, imply that everyone who learns the method can accomplish these results. Skimming, which is what is being shown, is a useful technique but only one of many skills required for successful college study.

In the course itself, a great deal of pressure is placed on students to read fast. The matetrials used are simple and the student is continually assured that if he believes in the method, and practices enough, comprehension will come. It is incredible that even the most naive adolescent could accept the idea that reading "The Three Little Pigs" or "The Hardy Boys" at 10,000 words per minute with no mental effort could help them in their college literature or science courses, but some do.

We have found that rehabilitating the victims of superspeed reading courses is difficult because they so often cling to the belief that their problem is slow reading, despite objective evidence that they have poor work-attack skills, limited vocabulary and miserable comprehension. The brighter students sooner or later realize that college study requires intensive reading skills and adjust their reading to a slower pace, but we have seen a number of freshmen who had failed courses their first semester because they had not recognized this fact quickly enough.

But what about the more typical college speed reading courses, you may ask. They do not promise that students can learn to read at 10,000 words per minute. They more modestly suggest that you can double your speed of reading without loss of comprehension if you take the course and practice. Reading tests are usually administered before and after the course in order to measure improvement. These courses never fail. The literature is full of reports of programs which successfully demonstrate significant speed gains.

There are also numerous studies reported in journals which indicate that speed of reading is affected by many factors including the purpose for which the person is reading. Requesting that a person read faster without sacrificing comprehension typically results in a significant increase in reading speed, yet our pretest measures rarely ever take this into consideration.

Recently I ran an experiment with a group of college students in which they were given two forms of a reading test, one under regular instructions and the other with instructions to force themselves consciously to read rapidly. As would be expected, they read significantly faster when told to read for speed, and there were no differences in their average comprehension score under the two conditions. Part of the group was then given a mimeographed handout describing techniques for improving reading speed and asked to practice speed reading daily for one week. The suggestions were typical of those given in reading courses—e.g., avoid regressing, eliminate vocalization, etc. The control group received no special instructions on speed reading. A week later, both groups were given a third form of the test with instructions to read for speed. The experimental group made significantly higher speed scores on the final test than the control group. Average comprehension scores were not significantly different for the two groups. The speed gains made by the experimental group compare favorably with those which have been reported as indicating positive results for students enrolled in college reading courses. Therefore, if we can get significant speed gains by merely handing students a sheet of instructions and telling them to practice, why go to the trouble, time, and expense of equipping and staffing a speed reading course?

Does Reading Training Improve Grades?

The ultimate goal of the reading program is often considered helping the student succeed academically. Grades have frequently been used as the criterion for evaluating services. A survey of the studies relating reading progress and grade-point averages suggests that the typical student who completes a college reading and study skills program can expect to raise his scholastic average one-half a grade.[1] However, a recent study, which analyzed grade improvement by subjects, revealed that students who took a college reading course earned higher grades in social science and literature, than a control group, but the reading improvement failed to affect their grades in science and mathematics.[2] This suggests that the activities involved in college reading programs have little relation to the skills involved in college science and mathematics courses.

Do Superior Students Need College Reading?

We talk a great deal about the importance of critical reading and higher level study skills in college, but few specific programs or techniques have been published. There is a dearth of workbooks and materials delineating skills necessary for the graduate student or adult. In fact, most of our materials are geared to the deficient college freshman. A recent survey of workbooks used in college and adult reading programs showed that none had a readability level higher than Grade 12.[3]

Commercial kits and learning programs are all designed for the precollege student. Some of these contain advanced material, but there is not enough to sustain the interest of the advanced or superior student.

As Phillip Shaw states, we need studies that investigate whether the reading needs of college freshmen are deficiencies that go back to high school or are new needs due to the differences between high school and college demands.[4] I would add that we need to determine whether there are skills needed by the college sophomores, juniors, seniors, and graduate students. If advanced work does require different skills, then appropriate materials and methods for teaching these skills must be developed.

Are Personality Characteristics Considered?

The relation between personality factors and reading skills has been strongly emphasized in recent years and personality tests are frequently given as part of the pretest battery. How helpful these scores are to the reading instructor is open to question. Profound changes in the attitudes and self-concepts of students sometimes do occur during the course of a reading program. We have all observed students who lose their fear of exams, or develop a deep interest in courses, or gain confidence in their interpersonal relations as well as their skills, but these are changes that just happen—rarely are they planned for systematically or included in the evaluation of the program.

The trend toward individualized, self-help reading programs at the college level has made it possible for the reading instructor to work more closely with the student, his motivational problems and needs. This changes the role of the reading specialist from that of the traditional instructor (who imparts information) to that of a personal counselor.

The shift from compulsory reading and study courses to offering the service on a voluntary basis takes cognizance of the importance of the students' motivation to improve, and places more responsibility for their improvement on them.

Whom Do We Serve?

Surveys on the number of students enrolled in college reading courses suggest that our services are used by only a very small proportion of the total student body in any given institution. Bott questioned

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[1] George Entwizle and Doris R. Entwisle, "Study Skills Courses in Medical Schools?" *Journal of Medical Education*, 35, No. 9 (Sept. 1960), pp. 843-848.

[2] Eugene S. Wright, "The Effect of Reading Training on College Achievement" in Alton L. Raygor (Ed.) *College and Adult Reading*, First Annual Yearbook of the North Central Reading Association, May, 1962. pp. 32-50.

[3] Bernard R. Belden, "Utilization of Readability Formulas for Effective Instruction" in E. P. Bliesmer (Ed.) *Problems Programs and Projects in College Reading*, Eleventh Yearbook of the National Reading Conference, 1962.

[4] Phillip B. Shaw, "Integration of Reading Instruction with Regular College Offerings," in E. P. Bliesmer (Ed.) *Phases of College and other Adult Reading Programs*. Tenth Annual Yearbook of the National Reading Conference, 1961, pp. 113-126.

88 undergraduate scholarship chairmen at the University of Maryland and states that they reported practically all of the students in their residential units had expressed problems in college reading and study skills. To whom do these students turn for help? Their primary source of assistance is other students, not the faculty nor the reading services designed by the administration to help students.[5]

There is a growing awareness on the part of college administrators of the tremendous influence students have on each other in the academic environment. In the reading area, programs are being developed to train undergraduates to help other students with their reading and study skills problems.

In conclusion, I feel that a complete reappraisal of the goals and objectives of college reading programs is needed. If we continue to confine our efforts to remedial work with college freshmen, college reading, like the dinosaur, will soon be extinct.

Secondly, as the superspeed reading programs have succeeded in antagonizing and insulting the intelligence of many people, a reaction is setting in. People are beginning to realize the illogic of reading speed as a worthwhile educational goal, and it is time that we stopped kidding ourselves that we are fulfilling a basic need in teaching college students to read faster.

In order to survive, college reading specialists must investigate systematically the skills needed for advanced work in college and if these do indeed exist, then new materials, measures and techniques must be developed. The importance of students' motivational and personality characteristics should not only be recognized but included in the planning and evaluation of reading programs.

When we regard the infinitesimal segment of the college population we are serving, we might wonder whose needs are being served, ours or the students'? If, indeed our techniques and skills are effective, new means of communicating these skills and ideas to more students are needed if we are to perform a significant function in our academic communities.

3. The College-Adult Reading Program as a Research Laboratory

EARL F. RANKIN, JR.

Despite the vast amount of research that has been carried out on reading, we remain vastly ignorant about the subject. There remains much to be learned about this exceedingly complex and important psychological process. More and better research must be undertaken to provide valid answers to both theoretical and empirical questions raised by scientists and practitioners in the field of reading.

Although the primary purpose of college-adult reading laboratories and clinics is to provide psychological services for the improvement of reading among college students and adults, their potentialities as important centers for research in reading should not be overlooked. Here lies a rich source of data which needs to be utilized more effectively. It should be emphasized, however, that far too much time and effort have been expended on countless, mundane "before-training" and "after-training" comparisons of reading skill which may be of some value for public relations purposes but which add little to the scientific understanding of reading.

With a little imagination and some powers of observation, an alert instructor of a college-adult reading program will find a wide variety of significant problems to investigate and a ready-made group of human "guinea pigs" who, with the proper orientation, will usually be willing to cooperate in a worthwhile scientific venture. Many hypotheses can be tested through use of already existing data which are routinely collected, such as reading, intelligence, and personality test results, interview records, and case histories. With careful planning, additional data can be collected from random samples of students if practical considerations limit use of the total group for this purpose. If the proper approach is used, data gathering procedures will interfere little with the service functions of the program and enhance their respect for the instructor as a scientist as well as a teacher.

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[5] Margaret M. Bott, "Environmental Influences on College Students' Study Habits and Attitudes." Paper read at the College Reading Association Meeting, April, 1963.

The conclusions drawn from such investigations may serve two distinct but interrelated purposes. The first purpose is to improve the college-adult reading program. A continuous program of applied research can provide an objective evaluation of proposed changes in diagnostic or instructional procedures and techniques. This will reduce the amount of guesswork involved in the improvement of reading and will enhance the value of such services for all students. The second purpose is to increase the general fund of knowledge concerning the psychology of reading. In the long run, such basic knowledge will prove to have even more practical value than the findings which have more immediate utility.

The remaining portion of this paper is devoted to a description of several investigations carried out by the present writer within the context of a college reading improvement program. It is hoped that these examples will serve to illustrate the achievement of the two previously described purposes.

Applied Research[1]

A practical decision which must be made by instructors in college-adult reading programs is whether or not to give training in speed to students who are low in comprehension skills. If we turn to the literature for advice on this problem, we find a general consensus that it is unwise to try to improve reading rate among students who are deficient in comprehension skills. It is thought that such training might only serve to further reduce the comprehension of these students. Rate is often viewed as a function of word recognition, vocabulary, and comprehension skills and, accordingly, it is maintained that any emphasis upon rate should follow the development of these more basic skills.

Despite the prevalence of this point of view, many college-adult reading programs do offer speed training to students who are deficient in comprehension. "Speed reading" is a popular concept, and most college students and adults are very much interested in such training. Is it possible that college-adult reading programs which attempt to improve the reading rate of slow readers with poor comprehension may be failing to help these students or may actually be hurting them?

An experiment was conducted by the writer to study this problem. Two groups of 48 college students enrolled in a Developmental Reading course were used as subjects. These students were considerably below average in both reading rate and comprehension as measured by the *Diagnostic Reading Test: Survey Section*. The Developmental Reading course taken by both groups was a full semester course which met four times a week. The course was divided into two halves—a speed-emphasis half of seven weeks' duration and a comprehension-emphasis half of seven weeks' duration. Each of the two groups took both halves of the course in alternate sequence. The speed-comprehension group received speed-emphasis training first followed by comprehension-emphasis training. The comprehension-speed group received comprehension-emphasis training first followed by speed-emphasis training.

During the speed-emphasis training, a number of techniques were utilized including exercises on reading accelerators and the controlled reader and timed readings. Nothing was done about comprehension other than to tell the students to try to keep their comprehension scores at 70 per cent or above.

A variety of approaches was used during the comprehension-emphasis half of the course. Students received training on specific comprehension skills. Lectures and discussions took place on study methods and ways to improve psychological processes such as concentration and memory. No work was ever timed. The students were encouraged to read at a pace which was comfortable for them.

Different forms of the *Diagnostic Reading Test: Survey Section* were administered at the beginning, mid-point, and end of the course. Also, the students anonymously evaluated the course at the mid-point and at the end by answering a brief questionnaire.

Results at the mid-point of the course showed that the group receiving speed-emphasis training were not only reading significantly faster than the other group, but also had improved as much in vocabulary, comprehension, and total score. Furthermore, their subjective evaluations of the course were generally in a more favorable direction.

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[1] This section is based upon the following source: Earl F. Rankin, Jr., "Sequential Emphasis upon Rate and Comprehension in a College Reading Improvement Program"; to be published in *The Journal of Developmental Reading*.

At the end of the course after each group had received both instructional emphases, the speed-comprehension group was still reading significantly faster than the comprehension-speed group, and their improvement in comprehension, vocabulary, and total score continued to equal that of the comprehension-speed group. As was the case at the mid-point, the group receiving speed-emphasis training first continued to evaluate the course more favorably than the other group.

It was concluded that speed training may profitably be used for poor readers at the college level even before their comprehension is brought up to a desired level.

Basic Research[2]

Eysenck, a psychologist at the University of London, has postulated a relationship between introversion-extroversion (a Jungian concept) and the excitation-inhibition balance (a Pavlovian concept) in a brilliant synthesis of personality and learning theory (3). Introversion-extroversion is considered by Eysenck to be a basic dimension of personality and a reflection of a hypothetical balance in the nervous system of two active but opposing processes. Excitation is a process by which modifications are made at the synapses which facilitate the transmission of nervous impulses. Inhibition is a kind of neural fatigue which hinders the transmission of impulses across synapses. Excitation is increased through reinforcement of responses, and inhibition is increased through repetition of responses. These two processes counteract each other such that when excitatory potential is equal to inhibitory potential, no response will take place. Individual organisms differ in the speed with which excitation and inhibition accumulate and dissipate. Also types of individuals, such as introverts and extroverts, are thought by Eysenck to differ with respect to the generation and dissipation of these processes. For reasons which, due to space limitations, cannot be described in this paper, Eysenck postulates that introverts are characterized by a balance of excitation over inhibition and that extroverts are characterized by a balance of inhibition over excitation.

There is a good bit of research which lends strong support to this theoretical speculation. Several investigations which support the theory and which provide an extension of the theory to research in reading will be summarized briefly.

Pavlov observed that some dogs tend to learn conditioned responses slowly, and when reinforcement ceased, their conditioned responses rapidly became extinct. In other dogs, conditioning occurred rapidly but extinction took place slowly. Such individual differences in rate of conditioning and extinction were viewed by Pavlov as a manifestation of individual differences in the excitation-inhibition balance. Speed of conditioning is a positive function of the speed with which excitation is generated and a negative function of the speed with which inhibition is generated. Rate of extinction is a positive function of the speed with which excitation is dissipated and a negative function of the speed with which inhibition is dissipated.

From Eysenck's theory it can be predicted that introverts will condition rapidly and extinguish slowly and that extroverts will condition slowly and extinguish rapidly. This prediction has been confirmed by Franks (6).

The ability to persist in some activity over a prolonged period is also a function of the excitation-inhibition ratio. With repetition of responses, the strength of inhibition is increased and this is experienced subjectively as boredom or fatigue. Therefore it can be predicted that extroverts will give up more quickly, work more slowly, or make more mistakes than introverts on tasks requiring sustained effort or attention. These predictions have been confirmed on different tasks by Foulds (5), Eysenck (4), and Broadbent (2).

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[2] This section is based upon the following sources:

Earl F. Rankin, Jr., "Reading Test Reliability and Validity as a Function of Introversion-Extroversion," *The Journal of Developmental Reading*, 6, 1963, pp. 106-117.

Earl F. Rankin, Jr., "Reading Test Performance of Introverts and Extroverts"; to be published in the *1963 Yearbook of the National Reading Conference*, Marquette University, Milwaukee, Wis.

Other psychological characteristics related to the excitation-inhibition balance are impulsivity and intra-individual variability. An imbalance of inhibition over excitation is manifested in the form of sudden and erratic shifts in behavior which makes for inconsistency and unpredictability of performance from one moment in time to another. A significant positive relationship has been found by Barrett (1) between impulsivity and intra-individual variability and by Donald E. P. Smith (personal communication) between impulsivity and extroversion. Introverts tend to base action upon thought, whereas extroverts tend to act more on the spur of the moment without prior reflection.

The foregoing theory and research has important implications for the psychology of reading. The writer has predicted that introverts and extroverts will differ in predictable ways in their reading as measured by standardized reading tests. Systematic differences between introverts and extroverts on reading test performance will now be described.

In so far as reading is learned through a conditioning process, it can be expected that introverts should be better readers than extroverts. Reading, particularly in the early stages of development, is learned by conditioning meaningful responses to written symbols which formerly were elicited by auditory symbols. Since introverts condition more easily than extroverts, we might expect them to develop into better readers as college students. The writer has found that the mean test score on the *Cooperative Reading Test* indicated significantly higher rating for introverted than for extroverted college students.

If introverts can persist longer on tasks demanding sustained effort and attention, we might expect this tendency to be reflected in responses to reading test items which require persistence and vigilance. The writer has compared mean errors on successive thirds of the *Cooperative Reading Test* by introverted and extroverted college students. He found no significant difference in errors on the first third of the test. However, he found that extroverts tended to make progressively more errors than the introverts as they worked their way through the test.

The expectation that extroverts should display greater intra-individual variability of behavior than introverts led the writer to predict that reading test reliability would be significantly lower for extroverts than for introverts. This prediction was confirmed by using split-half reliability coefficients on the *Cooperative Reading Test*. On the *Diagnostic Reading Test: Survey Section*, test-retest reliability coefficients were compared for introverts, ambiverts, and extroverts. It was found that the magnitude of the reliability coefficient was an inverse function of the degree of extroversion.

Since reading test reliability is lower for extroverts than for introverts, it was predicted that reading test validity would also be lower for extroverts. Total scores on the *Cooperative Reading Test* were correlated with grade point average for a group of college freshmen. A strong relationship was found between reading test performance and grade point average for introverted students. For extroverted students, there was no significant relationship.

Although the practical importance of these findings is not immediately obvious, it is hoped that such research will help to increase the general fund of knowledge concerning the psychology of reading.

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4. Study Reading and Subject Needs

KENNETH P. BALDRIDGE

I have been noting with interest, in recent years, the rapid rise of machines which attempt to do your reading for you: films, flashing projectors, teaching machines. I do recognize the importance of these machines, especially the teaching machine and its liberated offspring, the nonmachine programmed text *provided* they are seen as an adjunct to the central process of reading from a traditional book.

In any reading instruction using machines or any adjunct or exercise material, there must be a constant reference to the student's real needs, the assignments he currently has in his own subject texts. Proficiency in *exercise* material itself is no criterion of reading improvement.

A student reduced to the reading of short bits in teaching machines in order to respond with a single word or phrase may well revert to a primitive or primer level of reading—capable of handling only a single sentence or paragraph, without the capacity for seeing wholes or critically examining the relevance of one piece of evidence to another, the order of presentation, or the continuing purpose of the material.

The Reading Teacher; College Students; Subject Needs and Goals

Having indicated my preference for the traditional book, I must now fulfill the contract of my title—Study Reading and Subject Needs—and indicate how I and my associates have experienced and considered some components of the meeting between the reading teacher and the college student. There seem to be four areas, or components, that are discussable in this confrontation:

(1) The reading teacher's technology
(2) The student's current skills
(3) The subject demands that are now being made on the student and those that will follow in subsequent years
(4) The end or goal of the first three components is an independently functioning reader, confident in his approach to current tasks and capable of adapting to new tasks.

My own feeling is that the first three components are so often separated from each other that the over-all goal of independence for new situations is not usually reached.

In many reading programs today, the student's skills are observed only through the data of performance on exercises and materials totally unrelated to the outside-the-clinic demands of his class work. The reading teacher may so effectively conceal the technology from the student as to seem to be setting arbitrary and disconnected tasks. A student may well become an expert on a certain set of exercises and then flunk his history and English courses; he may then ascribe his failure to the loss of study time caused by his attendance at a reading program.

What the subject teacher is seeking for the student is an *independence* in dealing with the data and ideas of the discipline. In order to fulfill the demands of the subject teacher, the student must be capable of reading his texts and must additionally be capable of reading in an appropriate fashion the nontext material that broadens and deepens his awareness.

The student must have developed a strong central reading *strategy*, but must also have adapted *tactics* to cope with varying demands of each subject in materials that parallel his subject needs.

Major Study Reading Skills

But what are these reading skills that the student must have—whether in the strategic or tactical sense—and how can the dialectic between discovery and application in subject-oriented materials and application to current subject assignments be maintained? I would propose to group the many subskills of study reading into four broad categories: Concentration, Structure, Rate-Exploration, and Critical Evaluation. We have devised what we call skill models for each of these categories, and perhaps the experience that we have had teaching these models to students and preparing materials to use with them will be of assistance to you in approaching Study Reading and Subject Needs.

Table I

Summary of Components of Four Major Skill Models

Skill Models	Integrated Skill Components
1. Concentration	a. Preread b. Question to Anticipate c. Visualize d. Summarize
2. Structure	a. Central Theme b. Main Points c. Details d. Inference e. Vocabulary f. Not Given
3. Rate-Exploration	a. Too Fast—Too Slow b. Best Speed Zone c. Phrase Read
4. Critical Evaluation	a. Summaries of Selections b. Similarities-Differences c. Critical Evaluation (and supporting evidence)

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A Concentration Skill Model

A skill model for concentration has been effective as the initial reading skill to be mastered, assuming competence in word recognition.

Let me describe a typical concentration exercise that we have found effective. (*See page 80 for the concentration components*). The student begins by prereading or surveying a selection one or two pages in length taken from a textbook in common usage in history, science, literature, mathematics, or language. The prereading is facilitated by underlined topic sentences and introductory material. The student next decides which of five questions given to him could most likely be answered after a thorough reading—that is, questions that fall within the scope of the material preread.

Having checked his answers to assure that he understands the limitations and possibilities of the material, the student then reads the material a paragraph at a time, summarizing after each paragraph. After reading and summarizing each paragraph, the student summarizes the whole passage.

After an exercise in visualization of some part of the material, the student goes on to answer the comprehension questions about the selection he has read. In this approach the student is able to analyze a number of factors in his reading performance and is able to learn from the mistakes he makes as well as from his successes.

Following the work on the subject-related exercise material, the student applies the concentration skill model to a current assignment in his own texts using a skill application sheet which carries on the skill model for his independent use.

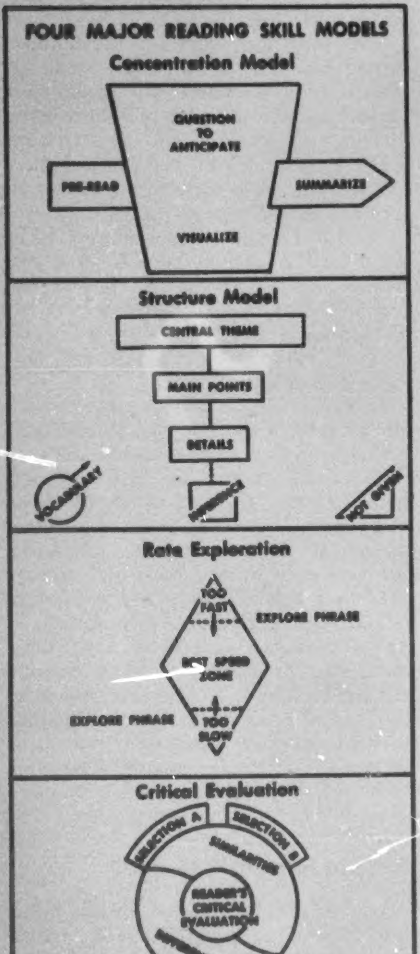
After the application to a real assignment, it is our expectation that the student will experience greater success in the subject class for which he was preparing. It is this satisfaction or validation that will confirm the effectiveness of the concentration model for the student and will give him confidence in the skill models to come.

However, we cannot simply settle for effectiveness in the student's current textbook, but must generalize his skills so that he will be able to cope with new books to come. The student later proceeds to a higher level of the training materials so that he can achieve maximum chance for validation of the skills and thereby develop independence in the application of these skills. This three-step method of (1) skill practice on text-derived reading materials, (2) application to the student's current textbooks, and (3) extension of skills to all reading situations with which the student may come into contact, is carried through also in the following skill models of Structure, Rate-Exploration, and Critical Evaluation.

A Structure Skill Model

Although to many students the structure implicit in a book is hard to find, there is a structure present in books, and it is through mastery of the structure that the student is able to learn the material as written, to go beyond what is written to the inferences possible from the data, and to remember what has been read and inferred. Efficent study-learning skills are all that keep the student ahead of that natural inherent skill of "efficient forgetting." We have all seen the student who notes only isolated facts, and is not only unable to discover the structure implicit in the textbook but who even ignores the built-in structural devices of the textbook that make its organization explicit.

In the structure skill model, the student selects a central theme for the selection; he then differentiates main ideas from details. After demonstrating his mastery of the vocabulary of the selection, he goes on to answer questions to test his capacity for recognizing items *not given* in the selection and items that can be inferred from the selection.


FOUR MAJOR READING SKILL MODELS
Concentration Model
QUESTION TO ANTICIPATE
PRE-READ
SUMMARIZE
VISUALIZE
Structure Model
CENTRAL THEME
MAIN POINTS
DETAILS
VOCABULARY
INFERENCE
NOT GIVEN
Rate Exploration
TOO FAST
EXPLORE PHRASE
BEST SPEED ZONE
EXPLORE PHRASE
TOO SLOW
Critical Evaluation
SELECTION A
SELECTION B
SIMILARITIES
READER'S CRITICAL EVALUATION
DIFFERENCES
READER'S SUMMARIES OF SELECTIONS

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A Rate-Exploration Skill Model

A rate-exploration skill model is used to give the student an opportunity to explore a range of reading rates, to adapt his reading rate to the kinds of material he is reading and to the specific purposes with which he is approaching the material. By keeping the student's exploration of rate oriented toward the demands of his classroom work, the danger of the student accepting unbelievable speeds as desirable is avoided.

In avoiding the fantasy of unbelievable reading rates, one must not embrace slow reading as a skill. Slow reading in itself is the absence of skill; but slow reading, when appropriate, combined with an awareness of structure and a capacity for concentration is a most necessary skill. The rate-exploration model is designed to assist the student in mastering a repertoire of reading rates, and most importantly, to assist the student in knowing when to use the slower rate and when to use the faster one.

For his practice in the rate-exploration model, the student reads a text-derived selection. The student then takes a phrasing exercise from which he can learn that whether reading fast or slowly, he must read with an awareness of the rhythm and structure of the language. A *second* rapid reading of the same page follows, and the student then answers comprehension questions on the material twice read. It is important in such an exercise that the student not simply note his score, but that he interpret his performance on the comprehension questions. During this exploratory phase, there should be no imputation of failure if the student gets fewer than the required number of questions right; there should simply be the awareness that the reading rate was too rapid and should be adjusted downward. Conversely, if the student gets all the comprehension questions correct, he must consider whether he should attempt to read a little faster in a second exercise immediately following the first.

A Critical Evaluation Skill Model

A student who has mastered the three previous models would probably be as good a functioning reader as the reading teacher would normally expect. But having brought the reader through these models, there is the great opportunity to assist him in making the transition to what can be called "total reading with thorough evaluation of material."

The model of critical evaluative reading can lead to a superior level of reading, qualitatively. The materials that we have used guide the student to proficiency in analyzing statements within text-derived materials, making comparisons and isolating differences, identifying and evaluating supporting evidence.

The prepared material would consist of two text selections, each taken from a different study area: biology and physics, for example. The student first summarizes each selection separately. He then isolates similarities and differences between the two selections: differences in forms, in concept, in execution. Critical evaluation can be focused on the logic of certain items, esthetics of others, and other criteria appropriate to each subject area.

The skill of critical evaluation has been separated into its component steps: weighing evidence, comparing, evaluating, and drawing conclusions, preceded, of course, by a structured summary of what is explicitly stated. These steps are presented to the student visually and verbally so he may see and understand the varied functions involved in the achievement of the total skill. Therefore, the student can see how the components of different skills are similar and can grasp the fact that efficient reading is a dynamic function of highly interrelated and complementary tasks.

A few years ago the demand that every teacher become a teacher of reading was offered as a panacea. That didn't work out, or rather wasn't tried out. And I am not suggesting the opposite—that the reading teacher become a teacher of everything.

It may be possible that through models such as those mentioned above the reading teacher or consultant may be better able to reach the student in the reading class or clinic. The use of text-derived material and the subsequent direct application to his own assignments will give the student a rapid pay-off for the time spent in reading training.

Perhaps the use of models based on classroom texts will give *subject teachers* a clear design with which to reinforce the skills developed through the reading teacher. Such vertical and lateral integration of reading skills might make possible a firmer base for a dialogue between reading teacher or consultant and subject teacher than now exists—a dialogue that would result in increased effectiveness of each in his chosen area.

5. Flexibility in Reading

ARTHUR S. MCDONALD

For more than a quarter century reading flexibility has been considered one of the most important characteristics of effective reading. Reading flexibility has been so universally accepted that it has become an axiom, often stated as: "The hallmark of effective reading is flexibility."

The continually increasing pace of discovery in every field of learning (called by some the "information explosion") has brought a corresponding flood of printed material. This deluge has brought reading flexibility into new prominence because of the obvious need for effective extraction of information and the efficient processing of meaning from the never-ending stream of books, journals, monographs, and newspapers.

This increased stress on reading flexibility as a prime characteristic of reading evoked the following questions: What is it? How can it be taught? How can it be measured? What is the relationship of flexibility to other factors involved in reading?

A widely prevalent misconception

about reading flexibility concerns the ability of the reader to deliberately and consciously vary his reading *rate*. Such ability has been greatly overestimated. From the beginning of discussion of reading flexibility, it was asserted, on the basis of *a priori* (if seemingly logical) reasoning, that a flexible reader could and would select the *rate* which was best suited to his purpose and the reading material. So, reading flexibility was said (and often is still so defined) to be the ability to vary the rate of reading at will to meet different kinds of reading situations.

Yet, it is also recognized that reading rate is only *one* of the processes involved in reading performance. In defining the efficiency of the reading performance, numerous interpretations of the terms "reading rate" and "comprehension" have been proposed. Conflicting methods of computing reading efficiency based on various mixes of rate and comprehension scores have been devised. Some reading instructors have despaired of validly assessing reading efficiency with standardized tests. A few have even advocated the use of the reader's subjective evaluation of his reading performance. (As shown elsewhere, this type of assessment is especially likely to lead to "placebo" responses.)[1]

Thus it may be said that the nature of reading flexibility is misunderstood because of disagreement and confusion about:

1. relationship of speed and comprehension
2. differences between reading and skimming
3. ability of the reader to *consciously* change his reading pace while performing the complete reading act
4. methods of measuring reading efficiency

We suggest that much of this disagreement is the consequence of dealing with "rate" (i.e. the number of words over which a reader moves his eyes in a set time) and "comprehension" (the number of questions about a given reading selection answered correctly) as independent or coequal entities. They are neither. Both rate and comprehension are, of course, interdependent "constructs." The concept of reading rate as an independent factor in reading is patently illogical. We are never concerned with pure speed—that is, with just the rapidity with which a person can move his eyes over a given number of words without understanding. Similarly, treating comprehension as an independent factor introduces a host of complex variables (one of which, of course, would be intelligence). Many of these variables are only distantly related to the reading process itself, however much a part of the reader's behavioral processes they may be.

Important pioneering work carried on by Letson[2], Sheldon[3], and Spache[4, 5] revealed the great complexity of the reading characteristic known as flexibility. Further research has shown that readers possess very limited ability to vary their reading rate in accordance with explicit instructions (under circumstances involving comprehension also). For instance, Spache found that only five per cent of his college and adult subjects could do this. Research has lead to the conclusion that reading flexibility involves many specific factors rather than being one inclusive ability.

Our study of more than 6,000 elementary, secondary, college, and adult readers has shown that most persons are not efficient readers. More than 90 per cent tend to maintain a characteristic approach to nearly all types of reading, despite instructions for differentiation of purpose and in spite of variations in difficulty of style, text, and content. A majority even maintain this reading approach in spite of the spur of periodic timing pressures.[6]

Continued research has led us to conclude that reading flexibility consists of the ability to utilize those reading processes and techniques which are particularly appropriate for the style, difficulty level, and theme of the reading material while, at the same time, being consonant with achieving the reader's purpose at the optimum level of performance. Thus, the flexible reader possesses those reading skills, techniques, and methods of attack which enable him to achieve as complete an understanding of the author's meaning as is dictated by the reader's purpose. The flexible reader also has a psychological set toward the reading process which leads him to differentiate his reading approach to suit the difficulty of the article's content and style, the amount of background knowledge he possesses as well as the urgency of his need to satisfy his purpose through reading the article. The flexible reader, as the result of his attention to purpose, difficulty of material, complexity of theme, and background knowledge, makes many adjustments of reading approaches and specific techniques. These adjustments may occur within a single section or even a single paragraph of an article. Such adjustments are, of course, reflected in measurement of rate. Variability in rate, however, is *not* the *cause* of flexible reading. Rather, rate variability is the *result* of flexible reading approaches. Work with standardized paper-and-pencil instruments as well as eye-movement photography have clearly confirmed this conclusion.

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[1] Arthur S. McDonald, "The Placebo Response and Reading Research," *Twelfth Yearbook of the National Reading Conference*, 1963.

[2] Charles T. Letson, *The Construction and Evaluation of a Test to Measure the Flexibility of Reading Rate*. Unpublished doctoral thesis. Boston University, 1956.

[3] William D. Sheldon and L. W. Carillo, "The Flexibility of Reading Rate," *Journal of Educational Psychology*, 43 (1952), pp. 299-305.

[4] George D. Spache, "Diagnostic Tools" in *Fifth Yearbook of the Southwest Reading Conference*, 1955.

[5] George D. Spache and Paul Berg. *Faster Reading for Business*. New York: Thomas Y. Crowell Co., 1958.

[6] Arthur S. McDonald, "Factors Affecting Reading Test Performance," *Ninth Yearbook of the National Reading Conference*, 1960, pp. 29-35.

It will thus be appreciated that reading flexibility is truly a high-level reading ability. It rests on mastery of basic reading factors such as functional skills, perceptual skills, reading experience in general, a definite appreciation for different approaches in reading, etc. Therefore, it is futile to attempt to develop reading flexibility without insuring a sound reading foundation.

Reading as an intellectual activity requires, then, a certain indispensable basic level of instruction, intellectual aptitude, and experience. As a human activity, however, reading may be efficiently or inefficiently performed. The person who is efficient in reading is he who puts forth effort commensurate with the task.

It has been found that *mere* ability to talk about the importance and desirability of varying reading performance does not produce efficiency.

Investigations by Shores[7] and Sister Theophemia[8] clearly reveal that the majority of students do not alter their reading approach regardless of the instructions presented them, the type of material given them or the preliminary teaching they receive (in the form of being told the principles and purposes of varying "rate").

An issue which has complicated the teaching of reading flexibility—as well as its measurement—has been the disagreement about whether skimming and scanning are just faster reading or whether they belong in a separate category as a reading approach *sui generis*.

Discussing this issue, Spache[9] points out that skimming "cannot be confused with the normal act of reading and its physiological limits." Similarly, as a conclusion of his studies of skimming, Moore[10] asserted that "there are significant differences in skimming processes which place this type of reading in a category apart from slow, normal, and rapid reading."

Moore then warns that:

> Not all skimmers are good readers, as judged by scores they are able to make on comprehension tests of the materials used or on reading tests of a standardized nature. Some individuals are not able to answer any questions following their skimming—striking evidence of the price paid for speed. Some individuals who have mediocre or poor reading scores on standardized tests, are able to skim, perhaps defying logic as well as their own expectation of their abilities to successfully engage in skimming.

Many investigations have shown that flexible readers possess certain common characteristics. The flexible reader reads with a definite purpose in mind. It may be said, in fact, that most ineffective reading is the result of the lack of an operationally defined purpose on the part of the student. Flexibility in reading is also related to the reader's ability to perceive and adapt his reading approaches (*not rate*) to variations in style, content, difficulty of vocabulary, distance from his own background knowledge, and density of ideation. Further, the flexible reader, as Stone[11] suggests, varies his techniques to match the kind of "idea collecting" which his reading task demands.

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[7] J. Harlan Shores, "Reading of Science for Two Separate Purposes as Perceived by Sixth Grade Students and Able Adult Readers," *Elementary English*, 37 (1960), pp. 461-468.

[8] Sr. Mary Theophemia, CSSF, "Testing Flexibility in Reading," *Challenge and Experiment in Reading* (J. Allen Figurel, ed.), International Association Conference Proceedings 7, 1962, pp. 138-139.

[9] George D. Spache, *Toward Better Reading*. Champaign, Ill.: Garrard Publishing Company, 1963, p. 266.

[10] Walter J. Moore, "The Skimming Process in Silent Reading," *Challenge and Experiment in Reading* (J. Allen Figurel, ed.), International Reading Association Proceedings 7, 1962, p. 204.

Reading flexibility also requires certain emotional freedoms. The flexible reader feels free to look beyond the lines of words on the page to the meaning behind them. He dares to reshape the ideas and even to reorganize the structure of the passage in his idea-synthesis.

In contrast, as Laycock has pointed out[12]:

> . . . a rigid reader habitually uses a single approach that he has come to rely on. In fact, he uses it so regularly that he seldom, if ever, asks himself beforehand how he is going to read. But where a passage is such that he clearly should change, he may persist, nonetheless. It may be because his constitutional equipment permits little alteration, or because he does not recognize the appropriateness of change, or because he cannot permit himself the risk of trying something strange.

To attain reading efficiency, the student needs flexibility of attack rather than speed alone. He must read his text with the methods and techniques which will most effectively achieve his purpose rather than just getting through it rapidly or attaining near perfect comprehension.

A number of investigations have shown that most readers who possess reading flexibility (and, as previously noted, their proportion is small) have attained this efficiency on their own rather than as the result of formal instruction. But, since efficient reading is planned purposeful reading utilizing the most effective techniques for the material, purpose, and the reader's situation, the need is clearly indicated for assessment and *planned* development of reading flexibility. Teaching for this objective should begin as early as the fifth grade with those students who have attained basic reading adequacy.

In working to develop flexibility, teachers should present their students with a varied "reading diet": light, easy fiction; nonfiction of easy readability level; nonfiction of moderate readability difficulty; fiction of moderate readability difficulty; complex nonfiction written in a rather easy style, etc. The teacher should also insure that her students read for a variety of purposes: to learn the central idea of a selection with a few essential supporting facts; to find a single fact answering a specific question; to appreciate beauty of literary style; to understand and assess the thesis of the selection, evaluating the author's support of his main points with details and illustrations, etc. Discussions accompanying these reading tasks will help the students to realize that reading approach and choice of reading techniques are influenced by a few vital factors: difficulty of the material, amount of the reader's background information on the topic, vocabulary, style and theme of the author, and the student's purpose for reading.

The kind of instruction, the choice of reading material and the number, type, and frequency of reading assignments should be governed by the deficiencies and needs revealed by standardized assessment of the student's reading flexibility[13]. Weekly informal teacher-made tests can be used to provide both teacher and students with indications of progress in developing reading flexibility. Letson[14] has described two types of such tests and suggests methods of developing and using them.

Reading flexibility is no longer a "nice" goal to strive for if time permits. It is essential. The steadily increasing store of knowledge in every field of learning makes reading efficiency indispensable if teachers and students are to keep their learning current. The touchstone of reading efficiency, however, is reading flexibility. Research has shown and continues to underscore the great need for systematic instructional programs aimed at developing and maintaining this indispensable reading characteristic. Thus, reading instruction and assessment must be reshaped to include the attainment of reading flexibility as a prime objective.

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[11] David R. Stone, "Speed of Idea Collecting," *Journal of Developmental Reading*, 5 (1962), pp. 149-156.

[12] Frank Laycock, "The Flexibility Hypothesis in Reading and the Work of Piaget," *Challenge and Experiment in Reading* (J. Allen Figurel, ed.), International Reading Association Conference Proceedings 7, 1962, p. 242.

[13] Standardized tests measuring reading flexibility which are currently available are:

George D. Spache, *Reading Flexibility Test*. University of Florida, Gainesville, Fla., 1956 (for college students and adults).

Arthur S. McDonald and Sr. M. Alodia, *Reading Versatility Test* (Basic). Huntington, N.Y.: Educational Developmental Laboratories, Inc., 1961 (for 5th-9th grades; available in two equivalent forms).

Arthur S. McDonald, George Zimny, and James Byrne, *Reading Versatility Test* (Advanced). Huntington, N.Y.: Educational Developmental Laboratories, Inc., 1962 (available in two equivalent forms for high school seniors, college students and adults).

[14] Charles T. Letson, "Building an Informal Flexibility Test," *Education*, May, 1960.

6. Professional Needs of the Reading Teacher

LEONARD S. BRAAM

Relatively little rumination on this topic soon brings to the fore a variety of approaches which might be taken to the subject. In this paper let me discuss a few of those things which might head the list of needs of the individual professional reading teacher. (Although we are here thinking primarily about the professional reading teacher engaged in teaching of reading at the college and adult levels it is felt that with only slight modification these same needs exist and are applicable for professional reading teachers at all grade levels.)

It seems to me that the first and primary need of a professional reading teacher is that he or she be a good teacher. Without exploring them in great depth let me mention very briefly some of what seem to me to be important basic criteria of a good teacher necessary to meet the needs of a professional reading teacher.

A good teacher likes children, or students. I do not mean to sound bitter or pessimistic when I say that some teachers do not like children or students. But my observation of a great many teachers convinces me this is true. For some, teaching is a job to be endured daily until the last bell releases them from the ordeal. Such a person cannot be a good teacher, much less a good or professional reading teacher.

A good teacher understands and accepts children or students with all of their strengths, weaknesses, and sometimes irritating ways. She makes every effort to see the world, their tasks, their success, their frustrations from their perspective as learners. As Atticus says in *To Kill a Mockingbird* when trying to help Scout accept and understand her teacher (whom you will recall gave poor Scout a pretty bad time about reading on her first day of school) until you climb into his skin and walk around in it you can't really understand a person. I am firmly convinced that if more teachers would try just this they would be far more successful in helping their students to learn.

I do not mean to imply that we accept and condone a *status quo*. We have a very definite commitment as teachers to bring about change and growth. But this we cannot do unless we know and understand the point from which we begin. The converse of this is, of course, also true. A teacher needs to know where and in what direction she is leading and guiding. She needs to consider carefully what are realistic goals for each student. And we well know that these are not fixed or the same for each student.

Added to this the good teacher enjoys working with people. It seems to me quite possible to like children or students, to even understand and accept them, but to still not enjoy working with them. I suspect that there is no greater satisfaction for a good teacher than to work with an individual and to see progress and growth take place as a result.

A good teacher is curious. While she accepts the student, she has a deep curiosity about why he is the kind of a person he is and how these causes can be utilized or manipulated to help her help the student. The teacher is also curious in respect to growth in her own area of competence. She is probably never completely satisfied with either her knowledge or methods in helping students learn.

A good teacher is flexible. She is able to adjust attitude, instruction, and materials to fit the student and situation. More than likely she never uses the same approach or lesson plan twice without making adjustments to fit the situation and students involved. She has long since learned that one cannot teach "by the book." She needs to make adjustments and modifications continually to fit the particular situation and the particular student. To be flexible, a teacher needs also to be creative.

Combined with her flexibility (and creativity) she has the insight to realize when even the best and most carefully made (and perhaps previously successful) plans must be discarded in favor of an alternate approach in order to turn a frustrating or negative situation into a positive and successful one. She knows enough about the process of learning to realize that seldom, if ever, do frustrating experiences, especially if occurring repeatedly, produce positive learning.

She is able to adjust her attitude and approach to an individual or group, to be gentle, cajoling, humorous, firm, even angry as may be appropriate to produce the best atmosphere for learning.

And perhaps culminating all of these characteristics, the good teacher is proud of being a professional teacher. I cannot recall having ever heard a good teacher apologize for being a teacher, or to consider herself "just a schoolteacher." If she is good she knows it and is proud of it as a professional teacher.

In addition to being a basically good teacher, a professional reading teacher is not only interested in and enthusiastic about teaching, but quite specifically about teaching reading. I have had teachers come to me with the question "should I accept this job?" after having been asked or in some instances virtually directed to assume reading teacher responsibilities. (I must give such teachers much credit for realizing or at least suspecting the complications of teaching reading and therefore for raising the question.) I have known of college situations in which for various reasons (none of which would I consider professionally justifiable) teachers from various disciplines have been assigned responsibility for the teaching of reading courses and despite their lack of knowledge or interest in reading have found it necessary to attempt to fill such a role. More often than not such individuals have not been particularly interested in becoming reading teachers.

But, obviously, to be a good teacher interest in the teaching of reading is scarcely sufficient qualification to fill the role of a professional reading teacher. Specific intensive and extensive training is also mandatory. Without such training a good teacher can scarcely be considered a professional teacher of reading. Hand in hand with training must go experience —not only general teaching experience but specifically guided experience in the teaching of reading.

The Need for Training

Our International Reading Association Committee on Professional Standards has emphasized this need for training when they state that

> Until recently, reading was considered to be a rather simple process which should be learned in the early grades. We have now come to recognize it as a more complex act that develops with an individual from kindergarten through formal schooling and into adult life. As a result, the demand for trained personnel in reading at all levels has increased tremendously. With the demand high and the supply relatively short, the danger of unqualified persons attempting those tasks which only a trained reading specialist should undertake has become a very real one. One means of preventing such occurrences is by establishing minimum standards for the professional training of reading specialists.[1]

It will be noted, if you read the reports of this committee, that minimum standards recommended include both course work, which may be theoretical and practical laboratory or practicum experiences as an integral part of the training of professional reading teachers.

Through a good program of training and experience a good teacher's willingness to accept and ability to understand students should be enhanced. Pleasure and satisfaction in working with students should increase as a result of increased confidence and success in teaching reading.

A good program of training and experience results in an awareness (sometimes much to the surprise of the student) of the many still unanswered questions concerning the process of reading and the methods and procedures best suited to permit individuals to develop skill in the reading process.

Such awareness should serve to increase an already aroused curiosity about the unknowns of reading. It should begin to direct and channel such curiosity toward exploration of, and, hopefully, eventual solution of, some of these unknowns.

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[1] Pamphlet prepared by the Committee on Professional Standards, International Reading Association.

A good program of training and experience should also serve to strengthen the good teacher's flexibility and creativity and develop the realization that there is no "one way" either to learn to read or to the teaching of reading.

Finally, and hopefully culminating from the foregoing, a professional reading teacher must possess a sound understanding of the nature of the reading process.

Knowledge of all the intricacies of the complex reading process may be still far from complete. Until research provides us with more information there will continue to be much controversy over just what this process entails. We can nevertheless expect the professional reading teacher to possess what might be considered an operational concept of the reading process.

For example, the following six points might be considered the basis for a broad concept of the reading process.[3]

1. Reading is a way of behaving.
2. Reading is basically a native inborn behavior process.
3. Reading is characteristically a perceptual process.
4. Reading is the process of making discriminative reactions.
5. Reading is the essence of the educative process.
6. Reading involves peripheral, intellectual, and social aspects.

It is submitted then, that the needs of the individual professional reading teacher are to be a good teacher with a high degree of interest and enthusiasm for teaching reading, specialized training and experience, and a clear concept of the reading process.

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[3] Malcolm P. Douglass, "Four Marks of Superior Reading Teaching," *Claremont College Reading Conference*, Twenty-fourth Yearbook 1959.

D. Administration and Supervision of the Reading Program

1. Training Teachers for Today's Reading Program

DONALD D. DURRELL

Some of you are aware that my speech on this topic has already been given and is published in the IRA *Proceedings* for 1962, under the title "Challenge and Experiment in Teaching Reading." It suggests a minor revision of professional education through abandoning all on-campus courses and replacing them with laboratory approaches in which professors and students share the tasks of teaching pupils in clinics and classrooms.

During the week following the San Francisco meeting last year, I had the pleasure of observing the best reading methods course I have ever seen. At Fresno State College, John Manning's 30 juniors, instead of moving to the safety of the college classroom on Mondays, Wednesdays, and Fridays at 11 A.M., boarded a bus marked *Clovis Public Schools*. As the bus pulled away from the campus at 11:04, the juniors were already engaged in discussion teams of four, answering questions based upon professional reading. At 11:15, the bus stopped in front of a Clovis elementary school where 30 pupils were waiting to be tutored in reading: each pupil was at his table in the library which was set aside for this tutoring. For the next 45 minutes, Dr. Manning moved among the tutors, listening, commenting, asking questions, answering questions, or trying new procedures for later demonstration. At 12 noon the tutoring stopped; the juniors took out their lunches and began to eat while listening; Dr. Manning made a half-hour presentation of different techniques of teaching structural analysis of words, using materials that had been tried out with pupils that morning. At 12:30, the students divided into teams of four, with one student presenting the problems, plans, materials, and techniques relating to the child he was tutoring. At 12:45 the bus arrived to take the juniors back to the Fresno campus.

This approach points the way to many improvements in the scholarship of professional education. First, it centers on the only scholarship unique to education: the improvement of the efficiency of learning. Other academic fields are concerned about the content of education, the objectives of education, and the study of human behavior, but only professional education deals with improving the amount and quality of learning. The educational task in the Fresno course is clear: the pupils need help in reading; the college students are expected to provide this help under the leadership of the professor. It is so explicit and direct that one could even set up a professional competition: Which professor turns out the most effective tutors? No practice more quickly returns professional education to its primary objective than does the tutoring of children who have difficulty in learning.

The depth of professional education is greater through the tutoring approach. We all know the futility of teaching philosophy or psychology prior to student teaching; one gets shallow, nonfunctioning, verbal generalizations which seldom arise at the point of planning or practice. Even specific methods courses have serious transfer limitations if taught prior to need. I recall teaching a reading methods course, half of which came before and half came after student teaching. The students returned from practice teaching loaded with questions—which should have delighted me, except for the fact that every question had been answered during the first half of the course, many with demonstrations using pupils from the educational clinic. If we are to have functioning scholarship in professional education, apparently the essential principles have to be taught through *directed inductive techniques* at the times the problems arise.

The professional competence of the professor is particularly important in laboratory teaching. He cannot evade the specific task of improving learning; he cannot hide behind general principles in the attempt to escape the more difficult task of their application. He must be a master teacher of his subject, with sound research scholarship and superior clinical and classroom teaching experience. He must be engaged in the search for effective ways to improve instruction, with a recognition of the potential of a variety of approaches for different purposes. He must not be a cultist, a technician, or a specialist in happy compromise. He represents the highest scholarship in education; if he has no scholarship, education has none.

It should be noted that this is not an apprenticeship system, with a master teacher transmitting his craft to one or more apprentices. It is rather a research laboratory team, in which both professor and students search for more effective ways to teach. In such a laboratory, the problems are shared by all and the solutions equally shared; the professional library may have a higher yield than any other professional source. The greater the variety of problems and the more resourceful the team in discovering and applying new approaches, the richer the learning experience for all.

While practice tutoring provides a useful basis for a first course in reading, it cannot offer the variety of experiences needed by the classroom teacher of reading. Tutoring is essentially an individual service, while classroom teaching is a group service, involving all of the complexities of *differentiation of instruction.* Tutoring emphasizes reading skills, while the classroom teacher must work with the *enrichment of instruction* in the entire reading program.

Differentiation of Instruction

The mark of the professional teacher in any subject—golf, tennis, piano, skating, or reading—is the ability to analyze and correct weaknesses in the student's performance. This ability is best taught through the clinical approach. Any teacher who has discovered the power of precisely adjusted instruction will never be content with uniform classroom instruction. A former member of Dr. Manning's course, while engaged in that doubtful experience of "observation teaching," remarked upon the agony of sitting each day watching children with serious reading difficulties about which nothing was done.

The clinic approach fails to provide

the needed instructional opportunities for learning to differentiate instruction. Handling the reading subskills patterns of one individual is fairly complex, but the classroom teacher is asked to provide for *different subskills patterns* of 30 individuals, with several *levels of reading ability*, with different *rates of progress*, while maintaining high *intensity* of individual learning. There is no question of the reality of these variables; they are present and must be dealt with. What does the first-grade teacher do when she finds in September that some children read at third-grade level while others do not even know letter names? What does the fourth-grade teacher do with a range of reading abilities from first to ninth? Grouping on the basis of ability in reading is no answer, since pupils of the same reading level differ in subskills needs as well as in learning rates which require different densities of practice material. The maintenance of high intensity of individual learning in the class situation requires careful management, especially in oral activities in which pupils "wait for turns" or must listen to explanations unsuited to their needs.

It is at this point in professional education that the professor sometimes slips behind his verbal generalities and turns the student over to the critic teacher who has found security in relatively uniform instruction. Until professors, critic teachers, and students share a cooperative attack on the problem of differentiation of instruction, we can expect little progress. In our laboratory in elementary supervision, professor and supervisor replace the classroom teacher for a week of practice demonstration teaching in methods of differentiating instruction; it is a rough experience for professor and supervisor. A few days of such teaching make both acutely aware of the fact that with the instructional materials of 1963, only a crude job of differentiation may be done. We must have many types of "programs" using different modes of presentation: learning packages, graded study guides, programed textbooks and workbooks, teaching machines, tape recorders, projectors, and other devices; we must try many forms of pupil-team learning and grouping for mutual aid in learning; we must learn more about the subskills of various subjects and translate this knowledge into instructional tests and self-teaching, self-correcting materials. A large share of skills instruction will eventually be accomplished through self-directing instructional materials, leaving the more complex tasks of enrichment of learning to the imagination of the classroom teacher.

Enrichment of Instruction

The *improvement of understanding* is the first element of the enrichment of instruction. A fact, concept, or principle will be understood with different degrees of clarity and utility, depending upon conditions of its presentation. Understanding is improved through illustrations, applications, relationships; it is here that we use pictures, motion pictures, objects, displays, exhibits, experiments, demonstrations, field trips, dramatization, discussion, reference books. We are also concerned with discovery techniques, inductive methods, case methods, problem methods, unit teaching, concept development, structural relationships.

It is in this area of the improvement of understanding that we may expect assistance from our colleagues in the academic fields. Especially in science and mathematics has the yield been relatively high. In the teaching of reading, our linguistics friends are clamoring to assist us, if not to replace us entirely. A knowledge of the structure of language has always been useful to the student of reading, even when it was called "language" rather than "linguistics." It should be included in the preparation of the reading teacher.

The integration of knowledge into *thinking and action* is a second area of enrichment of instruction. What one reads must be related to thinking and action if it is to survive. Everyone recognizes the importance of thinking, yet scholarship in this area moves slowly and inadequately. It is often tied to creativity and inventiveness. We lack clear definitions and classifications of thinking, even though we find that each field of educational scholarship tends to claim thinking as its special possession. In my own research in relation to thinking and reading abilities, I find the following classifications of thinking useful: elaborative, critical, and organizational.

Quality of learning is also indicated by the *development of initiative* on the part of the learner. There is no greater waste in education than the loss of knowledge resulting from discontinued learning. The creation of permanent tastes and interests is part of the contribution of the superior teacher. Often in the concern with development of reading skills, we neglect the more important habits of learning to use reading for a great variety of purposes. This development of initiative in learning has its own psychology, still largely unexplored.

Finally, under enrichment of learning, is placed the development of *personal and social abilities* in and through learning. This is a proper concern of professional education and requires closer attention than it often receives in classroom instruction.

Moving Teacher Education to the Schools

No field of scholarship is more complex than that of professional education. All of the factors in differentiation and enrichment of instruction operate simultaneously in each classroom and in each subject. There is no doubt of the reality of these variables: they are all measurable and they all respond to specific teaching. But how can we transmit an art which requires the simultaneous observation of and adjustment to so many variables?

First, we must simplify the task by returning to the primary purpose of professional education: the improvement of the effectiveness of learning. Through moving professional courses into the schools, and providing a variety of experiences which have the sole concern of improving learning, we can develop a body of scholarship that is worth transmitting. What is proposed is a curriculum of experiences related to the problems of differentiation and enrichment of instruction, a direct attack on the problems of the classroom teacher. Since that task is too complex for the student without teaching experience, it is proposed that the first course be practice tutoring of individuals with unique learning problems. As these simpler learning abilities are mastered, the learning team of professors, classroom teachers, and student teachers moves to the more complex tasks of classroom teaching. Small groups of pupils may be taught through techniques specially developed for them; materials and techniques may be designed for differentiating instruction in one subject; mass instructional approaches may be designed for situations where such approaches are suitable; self-directing lessons in great variety may be prepared. All of the scholarship the professors, teachers, and students can bring to bear on these problems will aid in the search for more effective learning and will establish the habit of that search among future teachers.

Will all professional courses be taught through laboratory practice? I think that it is a safe guide that if the generalizations of any field now offered in professional education do not arise in the solution of problems in clinic or classroom, that field may be omitted safely from teacher education. If the generalizations do arise, it is evident that the laboratory approach is effective in reaching them, and there is no need for separate presentation.

2. Administration and Supervision of the Reading Program—An In-Service Training Program for Teachers of Reading

GWEN HORSMAN

There are several reasons for the need of an in-service training program for teachers of reading. Perhaps the three that cause the greatest concern are: (1) great numbers of new teachers are beginning their teaching careers inadequately prepared to teach children to read on any grade level; (2) many teachers slip into a teaching rut which becomes so deep it is impossible to gain a view of the new and interesting practices going on around them; (3) so many school systems have experimented with new procedures in reading while others have refined and enriched old methods and techniques that it requires constant study and appraisal to provide and maintain the best reading program a school system can effect. Other reasons include the need to retrain the older teachers who are returning to teaching after spending many years in raising a family and managing a home; the provision of help for the great army of substitute teachers who volunteer to teach during school emergencies; and the need to provide a program which gives teachers an opportunity to study and evaluate new methods and materials in the field of reading. This paper will suggest a dozen practices which have been successful in the city of Detroit.

Reading Course

When special emphasis was placed on the teaching of reading in the high schools, a *reading course* was planned for teachers. It dealt with the following topics on a secondary level:

1. Techniques in teaching reading
2. Fundamental principles of teaching reading
3. Locating, diagnosing, and interpreting reading difficulties
4. Teaching the basic reading skills (interpretive)
5. Methods of word attack, (contextual, word-form, structural, phonetic, and dictionary)
6. Teaching reading in the content fields
7. The characteristics of a developmental reading program
8. Ability grouping (teaching the remedial, average, and gifted)

This planned series of discussions was conducted in eighteen senior high schools for teachers in the English departments. Teachers from other content areas were invited. Attendance was voluntary. The high school reading supervisor was responsible for the presentations used.

Demonstrations in Reading

Immediately following the last lesson in the reading course a series of demonstrations in the teaching of reading was planned for the various grade levels in high schools. Lessons were taught from the materials regularly used in the English classes. These classes were conducted in a study hall to permit room for the visiting teachers to sit. Teachers from many departments in the high schools attended voluntarily and remained for the group discussion which followed the teaching period.

Throughout the years demonstrations in the teaching of reading have been given on every grade level by talented teachers and supervisors. This form of in-service training has been popular with teachers and student teachers.

Study Committees

In the nine different districts of Detroit the district administrators appointed study committees, made up of teachers who were particularly interested in the field of reading. Their job was twofold:

1. To review the reading program, discuss major problems, and make plans for resolving them.
2. To survey current literature on the subject of teaching reading and present worthwhile information to the other members of the faculties.

Discussion Groups

Discussion groups were formed for the following purposes:

1. To discuss problems and share ideas concerning ways and means of improving the reading program at specific grade levels.
2. To learn more about the continuity of the reading program as the students move from grade to grade; to review the objectives of the program vertically.

Television Viewing

A television series entitled "Reading for Teachers" offers a sort of refresher course in sound basic methods and promising innovations in the teaching of reading. The programs go on the air at eight o'clock on Monday mornings and at noon on Tuesdays. They are one-half hour in length. These programs arc designed by supervisors and teachers.

In September 1962 a series of television lessons in reading entitled "Come, Let's Read" was introduced in grade 3B. A total of 177 schools volunteered to take part in the program. This involves 254 teachers and more than 9,600 children. Viewing teachers see new practices and procedures while working in a classroom.

Radio Listening

For many years a program entitled "Memo to Teachers" has been presented in the schools once a week from 3:30 to 4 o'clock. Supervisors, administrators, and teachers have carefully prepared suggestions to help enhance teaching in the classroom. This radio program deals with the improvement of teaching in every content area. Specified dates are assigned to the supervisors of these areas and they, in turn, send outlines of the prepared program to principals of schools so that all teachers concerned with specific areas are alerted.

Workshops

For the past five years workshops have been offered to help teachers develop a keener insight into the complex act of learning to read. Teachers are paid to participate in these group meetings which often culminate in the publication of new guides or courses of study for use throughout the city. Some of the workshops are briefly described:

Workshop for teachers of beginning reading or reading readiness: For eight days in July, 1962, 23 teachers met to acquire a background in preparation for leadership in the art of teaching reading readiness and beginning reading. Areas such as the following were covered:

1. How to become cognizant of physical factors of children
2. How to judge mental ability
3. How to become aware of psychological and social problems
4. How to identify the contributions made by the kindergarten
5. How to foster a smooth transition from kindergarten to first grade
6. How to administer reading readiness tests
7. How to group for instruction
8. How to develop visual competence

Workshop for beginning homeroom teachers: In order to bridge the gap between theory and practice for new teachers, a three-day reading workshop for both primary and upper elementary homeroom teachers was introduced for 60 teachers. Practices and procedures in the teaching of reading were discussed in a practical, down-to-earth manner.

Workshop for elementary teachers of reading: Each summer for the past five years several 15-hour workshops have been offered as refresher courses in the teaching of reading. During the summer of 1962 a total of 175 teachers enrolled in these workshops which began at eight in the morning. Each teacher received a certificate of attendance, and a duplicate copy was placed in the personnel file for recording.

Workshop for high school teachers of reading: In July, 1963, a workshop for high school teachers will be conducted to help solve the problem which is so acute at this time. It will deal with the problems of teaching in classrooms where students' reading abilities range from fourth grade reading level through college levels of performance. Special emphasis will be placed on a study of materials suitable for teaching the skills involved in reading on a secondary level. Some time will be devoted to acquainting teachers with the administering of reading tests and evaluating the scores.

Reading Conference

One of the most valuable areas of inservice training for teachers, administrators, and supervisors has come from participation in the Metropolitan Detroit Reading Conference. For about 20 years the officers of this large conference have brought to Detroit such outstanding speakers as Arthur Gates, William S. Gray, Dora B. Smith, Ernest Horn, Angela Broening, Leland Jacobs, Albert Harris, Helen Robinson, William Kottmeyer, LaVerne Strong, John DeBoer, Morton Botel, H. Alan Robinson, and others. Membership in the conference consists of the payment of 50 cents in dues every two years. At present there are 2,577 members among the Board of Education employees.

Occasionally notes have been taken on different speakers' lectures and these are mimeographed and distributed to the members for continued study.

Reading Workroom

A reading workroom for teachers of elementary grades is available in one of the centrally located schools. This workroom contains samples of commercially prepared reading materials as well as teacher-made materials, such as bulletin boards, drill games, ideas for independent reading activities and the like. This room provides incentive for creativity on the part of teachers, and a practical way of disseminating worthwhile ideas among the schools. Many teachers find it a comfortable place to relax, browse, and exchange ideas.

School Visitation

One of the most rewarding techniques for in-service training is that of visiting teachers in other buildings or within the same building as the teacher concerned. Teachers in Detroit are permitted to take one day a year to visit, providing sufficient plans have been made ahead of time to insure proper care of the teaching within their own room during their absence. The principal is notified of the plan, the school to be visited is notified, and the substitute office is asked to provide a teacher. While many teachers do not avail themselves of this privilege others profit immeasurably.

Professional Reading

A majority of the schools in Detroit have appointed small committees to secure the best professional materials on the teaching of reading. These books and magazines, journals and articles are placed in a room that is accessible to members of the staff. Sometimes these materials are checked out and read by the various individuals; other times small groups are asked to report on the selections in order to acquaint teachers with the sources of help and guidance. Many teachers gain a sense of security after reading about ways of teaching in other city systems and about practices being used which match up pretty well with what they themselves are doing. The IRA publication, "The Reading Teacher" is a very popular magazine with teachers because it consistently presents ideas and practices which are understandable and practical for the average classroom.

Role of the Superintendent

This paper would not be complete if it did not include the role of the superintendent in stimulating and encouraging an in-service training for the teachers of reading. At the first general principals' meeting in October, 1962, he announced his interest in the reading program and his desire to promote every possible measure which would help teachers in their development of skill in helping children learn to read. He stated that this program would take top priority in interest and planning for the coming school year. Funds were made available for the initiation and continuance of any in-service practice which would further the teacher's ability to teach effectively. Backing and support from a superintendent in any school system goes a long, long way in stimulating any form of in-service training. Detroit is fortunate in this respect.

3. Common Problems in the Administration and Supervision of Reading Programs

J. ROY NEWTON

Problems faced by nearly all reading specialists tend to include some or all of the following: (1) problems of methods and materials, (2) problems of administrative grouping, (3) problems of evaluation, and (4) problems of personnel. Usually these are inextricably interwoven; but, for the sake of identifying the common difficulties we face, let us attempt to consider them separately.

Methods and materials. Unfortunately, the availability of materials sometimes dictates the method of reading instruction which is employed. This situation is especially true in the areas of basal readers and secondary textbooks. Limited resources may force the elementary teacher to follow a somewhat narrow approach unless she resorts to writing her own material. Many teachers are turning to co-basal readers and supplementary books to provide greater flexibility. The secondary teacher is frequently less fortunate.

In the past decade we have been asked to decide which is the "best" way of teaching primary reading: prereading phonics or the look-see-say whole word approach with phonics. The problem resolved is a fundamental one, difficult of solution for the reason that the two tend to be mutually exclusive. The solution is further complicated by a phenomenon which appears to be at work in situations where attempts are made to compare the relative efficacy of contrasting methods of reading instruction. In this phenomenon, the experimental group frequently is revealed as being slightly superior to the control group. Such comparative studies should be entered into with the realization that they must be continued for several years before conclusive results can be obtained.

What, then, is the best method of teaching primary reading? There is not likely to be an easy answer forthcoming to this question. However, we are finding that certain individuals learn better by certain discrete methods. Alternatively, certain avenues to learning such auditory discrimination or perception may not be functioning effectively. In these cases, additional and/or different instructional materials may be necessary before adequate learning can take place. Thus the probable answer to this problem appears to be that there can be no one "best" method; but that a combination of methods based upon the varying needs of individuals, with teachers thoroughly trained in a variety of approaches to reading instruction, is indicated. Immediate help should be available for the individual who is experiencing difficulty.

Turning to the area of materials for a minute, we find there are several problems. These range all the way from primary materials for children of differing social environments, having unrelated prereading experiences including differences in native language, to the difficulty of providing secondary textbooks of parallel content but written for several levels of ability. The latter is complicated but not impossible to provide. Factors determining difficulty such as sentence length, number of polysyllabic words, and fact-packing can be controlled. Concept development and the interrelatedness of these concepts remain, as always, one of the prime functions of the classroom teacher. One thing is certain. Publishers will not provide materials of carefully controlled difficulty unless teachers are vocal about the need for them.

One other problem involving materials should be noted. This is the problem of allocating materials to classroom and remedial teachers throughout all levels of the system. In general, there is a wealth of material in supplementary readers and trade books for the elementary grades. However, in many school systems, a tendency may be observed for teachers to appropriate high-interest low-difficulty materials (limited in supply) for use in the earlier grades. This practice deprives the teacher of slower groups in the intermediate grades and the secondary remedial teacher of necessary reading materials. Someone in every K-12 school system should be designated to allocate materials. Also helpful is the practice of authorizing someone in each of the primary and intermediate grades and in the various subject areas in the secondary school to collect and evaluate newer materials as they become available. College reading centers are frequently effective in disseminating information.

Administrative grouping. A second group of common problems facing the reading specialist includes those of organization. The purpose of administrative grouping is to facilitate the instructional work of the teacher. It is made necessary by two causes. First, basal readers are designed for the average learner who tends to make one year's progress in reading per academic year. Second, boys and girls, coming from differing backgrounds, and possessing differing abilities, learn at different rates. Chronological promotion, while sound psychologically, results in classrooms peopled with individuals of widely different reading abilities. In short, reading, by the very nature of the learners, is developmental.

Once again there is the temptation to select one type of organization as being best. And once again there can be no one "best" program for all school systems. What is best for one school, in one community, may be distinctly inferior for another school in another community. Factors to be considered are the training of the teaching staff, the size of the school, the attitude of the community, and, above all else, the educational needs of boys and girls whom the reading program serves.

What, then, are some of the ways of simplifying the work of the elementary classroom teacher? Homogeneous grouping tends to replace heterogeneous grouping when the size of the school permits. Of the many alternatives the following appear the most popular: ability sections, the Joplin plan, modified Joplin plan, elastic primary, and the ungraded classroom.

Many points must be kept in mind. (1) Changes may be made too swiftly for teachers and/or the community. (2) Alternatively, changes may not be forthcoming when desirable. (3) Boys and girls still profit from individual and group work. (4) Administrative organization will not make a good teacher out of a poor one. The most that administrative organization can do is to facilitate instruction by reducing the wide range of ability and thus securing a "better fit" between the learner and the instructional program.

At the secondary level a change in organization is not likely to be of concern to parents. However, it should be remembered that changes in primary and intermediate grades may profoundly affect the secondary program. Seventh and/or eighth grade *corrective* reading classes, meeting from two to five times per week, may be organized in the following ways: (1) club period, (2) reading laboratory, (3) homeroom period, (4) single or double English class, or (5) reading class.

Some schools are tempted to schedule reading classes in all six years of secondary school. A better solution relies upon the *developmental* program (all teachers in all subjects) for those reading up to their indicated ability and provides *remedial* help (better called "Personal Reading") for those in need of further instruction. Frequently a one-semester, get-ready-for-college course helps the college-bound young people. The goal of all secondary reading programs should be to make independent readers. This is not accomplished by providing reading class instruction for all students each year.

Evaluation. The third area under which common problems of administration and supervision group themselves is that of evaluation. When we speak of evaluation we are likely to think first of the evaluation accomplished by standardized tests. Reading supervisors should encourage teachers to experiment with tests with which they may not be familiar while continuing the regular testing program. The experienced administrator will encourage informal testing to determine achievement levels in reading. Very often this testing can be made part of classroom teaching procedures, thus avoiding the danger of devoting too much time to formalized testing.

Teachers need help in understanding the use that may be made of test results in grouping for instruction and in remediation. The only justifiable use of tests, formal or informal, is the improvement of instruction.

Evaluation should also include a survey of community resources. Frequently, nearby colleges, service organizations, or community agencies sponsor clinics. Such clinics can be of assistance in those cases which baffle the school psychologist and the reading teacher. A well-documented case study greatly aids in the selection of the correct community resource and in subsequent diagnosis.

Many of our reading problems will be resolved when each school has reading specialists who can handle remediation after diagnosis has been made. Many clinics find that remedial work becomes the bottleneck. Care should be taken to keep lines of communication open since the clinic is usually engaged in research and frequently requires additional data. The school, also, can profit from periodic re-evaluation by the clinic.

Evaluation should and must include a survey of the reading climate of the school. Such a survey should be repeated at regular intervals. Otherwise, through changes in school staff, and emphasis upon other curriculum developments, a reading program that was once superior may actually become inferior. To be assessed in such a survey are the contributions of individual teachers and departments, and the relative effectiveness of the whole school reading program.

Personnel. The last heading under which our common problems appear to arrange themselves is that of personnel.

Dr. Austin has raised a logical skepticism concerning the training of intermediate-grade teachers. Indications are plentiful that the situation may be far worse than Dr. Austin suggested. In 1960, only 23 states required a course in reading of all elementary teachers in training. Of this total, 11 incorporated reading with other subjects. In 23 states reading was not specifically mentioned. In 17 states the content of the elementary curriculum was left up to the individual colleges.

Turning to the professional education of secondary teachers, it is gratifying to note that Illinois now mandates work in reading of all subject teachers; and New York State, starting in the fall of 1963, requires such work of all English majors.

The professional training of reading specialists is another cause for dissatisfaction. Most of us will readily admit that one course does not make a specialist. Because of this, a subcommittee of the IRA, under the chairmanship of Dr. Charles Letson, has drawn up a suggestive list of Minimum Standards for Reading Specialists. These minimum standards should help colleges in planning graduate programs, students in selecting courses, and hiring officials in determining the qualifications of candidates for reading positions.

From the above, we see that much of the training of teachers of reading must be of the in-service variety. To mold a group of teachers, coming from different colleges and universities and oftentimes holding divergent views, should be thought of as a challenge.

Contrast, for a moment, the plight of a school anxious to do something about its reading problems but knowing little about evaluation or available materials and having no one trained in reading. In desperation the school authorities turn to commercial reading services who offer a six- or eight-week course. There is no question, here, of the materials or methods employed. In fact many of these programs are very good as far as they go. The question simply is: Can a school solve its reading problems in eight weeks?

In-service programs include one-day institutes, conferences, workshops, visitation and demonstration, participation in school surveys, and attendance at meetings devoted to aspects of reading instruction. Publishers representatives can be of great assistance to interested groups of teachers. Helpful, also, is a carefully selected professional library. However, the key resource person is the reading specialist aided by a Reading Improvement Committee and backed solidly by the school administration.

The reading program is, or should be, tied in with the larger administrative and instructional structure of the school. The modern trend presumes a reading program under the competent direction of the reading specialist.

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3. Newton, J. Roy. *Reading in Your School.* New York: McGraw-Hill Book Company, Inc., 1960.
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E. Reading in the Content Areas

1. Assessing the Reading Needs of Students in the Content Areas

EDITH JANES

The knowledge of the range of abilities and reading achievements of the pupils in a class enables the teacher to plan instruction intelligently, to make provisions for individual differences, to select appropriate materials, and to provide a continuous check on pupil progress.

Teachers who meet the needs of a new class systematically plan:

1. To find out where to begin instruction. This is necessary so that pupils do not become bored with repeating known material or become frustrated by lessons too difficult.
2. To know the I.Q. of each pupil in order to estimate the rate at which he can be expected to improve. This is important so that the teacher can plan the specific types of instruction needed by slow learners, by average pupils, and by accelerated groups.
3. To compare each pupil's reading achievement score with his I.Q. in order to estimate his reading grade expectancy. This helps the teacher identify those pupils who are working up to capacity and those who need to be challenged to greater efforts. Examination of anticipated scores and subtest scores help provide such information.
4. To survey the collected information about each pupil, to select materials to be used, to plan and to teach lessons geared to individual and class needs.

This discussion will be concerned only with assessing needs of pupils. Ways to meet these needs will be discussed in succeeding presentations in this sequence.

Able teachers determine needs of their pupils by assembling information from standardized tests, cumulative records, informal tests, observations, and interviews.

Standardized Tests—Cumulative Records

Reliable standardized tests are available to evaluate reading achievement or to assess needs in various content areas. A test which measures the skills which it purports to measure should be selected. Professional books by reading and content area authorities contain recommended lists of tests. Examination of a sample of the test should be made before placing school orders.

The cumulative or permanent record of a student often yields pertinent information about his academic progress, his attendance, his general health, and his family background.

Results of standardized tests and information on cumulative records should be readily available to classroom teachers. Teachers should remember that:

1. Scores on standardized reading tests are usually one level above the pupil's instructional level. Therefore a pupil scoring 5.2 on a reliable reading test should probably receive instruction in a fourth-grade book.
2. Changes in pupils' reading levels have occurred during the time following the last recorded scores.

Observations

The alert teacher observes pupils at work, records noticed weaknesses, and plans activities to overcome them. Pupils with such problems as lip movements, finger pointing, inadequate rate and comprehension skills, and poor study habits are easily identified for specific help.

Informal Inventories

During the first weeks of school, teachers use informal devices to estimate each pupil's instructional level quickly.

An informal word recognition inventory may be prepared from several graded texts in reading or in content areas. This vocabulary test may include ten to 15 words from primary-grade texts and 20 to 25 words from upper-grade texts. These words may be presented for flash recognition by the teacher's manipulation of two small cards in such a way that words are exposed singly in rapid succession.

The grade level at which the pupil misses more than one word may be considered his tentative instructional level and may be used as a guide for assigning books in reading or content area classes.

It may also be used as the starting place for administering an individual informal reading inventory.

A group informal reading inventory provides a rapid survey to find the instructional reading levels of individual pupils. Sets of books ordinarily used in the classroom may be used to test general ability and achievement.

A teacher may administer an informal silent reading inventory to find the instructional level of each pupil:

1. By asking pupils to read silently a selected story near the front of their reading texts.
2. By checking comprehension through pupils' written response to questions based on the story. (Include fact questions, inference questions, vocabulary questions, and summary questions.)
3. By asking those pupils who answered all questions correctly to read a similar selection in the next harder book in the series.
4. By asking those pupils who answered less than 75 per cent of the questions correctly to read a similar selection from a book one grade easier in the same series.

The grade level at which the pupil can answer 75 per cent of the questions correctly may be regarded as his instructional level. This would indicate the grade level of text that should be used for instruction.

An informal oral reading inventory may be administered using the same format. Pupils in small groups or individually may read a short selection aloud and answer the questions orally. Pupils should be able to pronounce correctly 95 per cent of the words in material at his instructional level. Only in testing situations are pupils asked to read orally at sight.

A pupil's independent reading level is normally one grade below his instructional level. Books read for pleasure should be at this independent level or easier so that pupils can enjoy the story without encountering the frustration of new and difficult words.

Most educators believe that a child's innate ability is reflected in his capacity for understanding what he hears. They believe that if he can hear and understand an eighth-grade story, he can read an eighth-grade story if his skills function at that level.

When I.Q. scores are not available, many teachers administer group listening ability tests, sometimes called hearing capacity tests. While they are probably less accurate for high school pupils than elementary pupils, listening tests do aid teachers to identify pupils with average, below-average, and above-average ability.

A teacher may administer a group listening ability test to find the hearing capacity of each pupil:

1. By reading to the pupils a story at their grade level. (For example, fifth-grade pupils would hear a fifth-grade story first, then harder or easier selections as indicated by pupils' responses.)
2. By checking comprehension through written response to questions based on the story. (Include fact questions, inference questions, vocabulary questions, and summary questions.)

The grade level at which the pupil can answer 75 per cent of the questions correctly, may be regarded as his hearing capacity or listening ability. By comparing a pupil's hearing capacity grade level with his actual grade level the teacher perceives a fairly accurate indication of whether the child's innate ability is average, above-average, or below-average for his age.

Classroom teachers may identify poor readers with average and above-average ability by careful observation. The following types may be able pupils needing reading instruction:

1. Pupils who can discuss intelligently what is read to them and what they see or experience, but who cannot read a lesson and understand it.
2. Pupils whose Language I.Q. on intelligence tests is much lower than his Non-Language I.Q.
3. Pupils whose Actual Score on Arithmetic Reasoning is much lower than his score on Arithmetic Fundamentals. This may indicate that he is not able to read the reasoning problems but has the mental ability to solve the problems if he could read them.

Betts[1] explains informal inventories in detail and provides directions for constructing and administering them.

In our school system, classroom teachers use informal inventories prepared from material in the basic readers. Our special reading teachers have constructed two forms, based on another series for use in our reading improvement classes.

Teachers in content areas may prefer to use published material for their initial, tentative evaluation. Lists of valid tests easily administered include the following tests:

1. Austin, M. C., Bush, C. L., and Huebner, M. H. *Reading Evaluation.* New York: Ronald Press, 1961, pp. 235-246. (Grades 1-8)
2. Gilmore, J. V. *Gilmore Oral Reading Test.* Chicago: World Book Company, 1952. Forms A, B (Grades 1-8)
3. McCall, William A. and Crabbs, Lelah Mae. *Standard Test Lessons in Reading.* New York: Teachers College, 1961. Books A, B, C, D, E (Grades 2-12)
4. Smith, Nila B. *Grades Selections for Informal Reading.* New York: New York University Press, 1959. (Grades 1-3)

Gray and Reese state that "Reading in the basic reader constitutes an easier task for children than reading in the content fields. Various important factors are controlled in the basic reader which cannot be similarly controlled in books dealing with subject-matter content. For example: vocabulary in the content field is usually more difficult; new terms are introduced faster and with fewer repetitions; more facts are presented to the reader; greater retention is expected; and references to previous facts occur with more frequency in historical, geographical and other such materials."[2]

Certainly the content area teacher needs to check each pupil's ability:

1. To master the specialized vocabulary of the subject by efficient use of such aids as context clues and structural analysis.
2. To do the kinds of reading required in the subject such as the problem solving approach in mathematics and science.
3. To perform the specialized reading tasks required in the subject, such as the reading of maps, charts, and resource material.

Content area teachers will learn much about each pupil's ability to read the text by preparing tests based on its material. The class should be told the purpose of the informal tests and understand that the results will not affect their class grades. Teaching may be combined with diagnosing as the answers are discussed with the class.

In planning for assessing pupil needs in reading a specific text, the content area teacher should first list the major reading skills necessary for the subject. Each day for several weeks one section of the daily assignment may be used as an informal test. Such tests would provide a check on background for the subject and on such skills as:

1. Ability to recognize context clues
2. Understanding of concepts and new words developed in previous grades
3. Ability to use the vocabulary correctly
4. Ability to use parts of the book
5. Ability to read the material orally

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[1] Emmett A. Betts, *Foundations of Reading Instruction.* New York: American Book Company, 1957, pp. 438-485.

[2] Lillian Gray and Dora Reese, *Teaching Children to Read.* New York: Ronald Press, 1957, p. 375.

6. Ability to identify main ideas and supporting details
7. Ability to perform other specialized reading tasks, identified by the teacher as necessary for efficient reading of subject area material

Teachers' guides accompanying content area texts usually contain good suggestions for assessing needs of pupils. Smith[4] provides word lists and vocabulary exercises in specific areas.

A check of specialized vocabulary words learned in the subject during the previous year enables the teacher to plan more effective instruction. For example, a list of social studies words [illegible]ncepts used in informal testing fo[illegible]ginning sixth grade would include such words as island, peninsula, and plateau. Pupils who make many mistakes will need specific instruction to develop a meaningful vocabulary. Pupils who understand the concepts taught in previous years can progress more rapidly and can study more independently.

Shepherd[5] gives specific directions and examples for assessing reading needs in social studies and science. His books were prepared for secondary teachers but contain many hints for all teachers of those subjects.

Strang and Bracken[6] show an example of a practice lesson in the reading of history. They include a diagnostic spelling test in the appendix.

Personal Interview

Teachers learn significant facts from their daily contacts and personal interviews with pupils. These should be recorded for future reference.

Summary

The efficient teacher combines information from standardized tests, intelligence tests, cumulative records, observations, informal tests, and personal interviews in order to find the instructional reading level, to select materials, and to plan instruction.

The assessing of reading needs in the content areas is a continuing process. The evaluation of pupil progress during the year identifies needs for special instruction. The material in each new unit must be surveyed to identify new words and new skills which require specific instruction.

Two favorable trends are apparent as we survey the future. Many authors of subject area materials are making books easier to read without neglecting content. More content area teachers are accepting the responsibility for helping students develop reading skills, habits, and attitudes needed in their own subject areas.

2. Organizational Patterns for Effective Reading Instruction

DON H. PARKER

Reading has been called many things, ranging from science, to art, to magic. I like to define reading as "a meeting of minds on paper." As such, it is perhaps more magic than anything else. The magic of reading has sent most lives soaring as in a spaceship, but for one man, reading's magic spelled doom, perhaps because he went only halfway—his second stage never ignited.

Less than a hundred years ago, a Cherokee Indian named Sequoia longed to put down on paper the words spoken by his tribe so his people could read their language as the white man read his. For years Sequoia experimented with various shaped symbols. Finally he arrived at a set of written characters that stood for the sounds in the Cherokee language. Now he taught his little daughter to read the words that he wrote. "What a wonderful thing," he thought. Now he could teach his fellow tribesmen to read so his people could indeed become a great nation.

One day he asked the chiefs to assemble so he could demonstrate his exciting new project. First, he sent his daughter several hundred yards away down by the river. Then he asked the head chief to say something. Now Sequoia wrote down what the chief said on a piece of bark. "Take this bark to my little daughter, oh great chief, and she will speak your own words." The old chief smiled; he would humor this young man.

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[4] Nila B. Smith, *Be a Better Reader*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1961. Books I, II, III, IV, V, VI.

[5] David L. Shepherd, *Effective Reading in Science* and *Effective Reading in Social Studies*. Evanston, Illinois: Row, Peterson and Co., 1960.

[6] Ruth Strang and Dorothy Bracken, *Making Better Readers*. Boston: D. C. Heath and Co., 1957, pp. 222-233, 356.

A few minutes later the chief handed the piece of bark to the young Indian maiden. Her eyes moved along the characters written on the bark, her mouth opened, and out came the very words of the chief.

The old Indian blinked his eyes and his jaw dropped. Here was magic that even his greatest medicine man could not perform. Sequoia must go! And so he did. The tribe burned his house down and ran him out of the village, with his little daughter sorrowing after him.

Escaping to the mountains of North Carolina, Sequoia began training a few Indian braves to read his symbols. The braves learned the skills and some even began teaching others, but Sequoia's written language did not flourish and soon died out. Why? Because Sequoia was able to go only halfway. He helped the young Indians *get* the skills of reading but he could not provide a body of literature—a body of written material—on which the Indians could *use* their skills. He provided skill-*getting*, but not skill-*using*. He provided *training*, but not *education*. Because he did not provide both, his efforts at schooling failed and he died an unhappy man, wandering through his last days in Mexico.

Today we are here to talk about Organizational Patterns for Effective Reading Instruction. Now what has the story of Sequoia got to do with our subject? I think it can teach us three important lessons to guide our search for organizational patterns for reading instruction in both the skill and the content areas:

1. We should not make the mistake Sequoia made, the mistake of only offering our pupils training.
2. Before we begin to look for patterns of effective reading instruction, we need to look for a pattern or "structure" of total schooling.
3. In developing a structure of total schooling, we should not, like the old chief, be held back by superstition.

Let's start with the last, first—don't be held back by superstitions. In our day and time, we might politely call these unwarranted and unvalidated assumptions. But by whatever name, the arguments over which is best, "traditional" or "progressive" education sound more like recitations of folklore and efforts to conjure up magic potions than hard-headed talk about children and learning. Neither side seems inclined to look at the facts. Both seem to ignore what we know in the behavioral sciences about individual differences, child development, and the psychology of learning. As a group, both traditionalists and progressives seem to be operating—as the old chief did—from a position of superstition rather than reasoned logic based on what we know about children, their differences, and how they learn. So let's avoid that pitfall. Let's not sell out to superstition. Let's not be caught up on the horns of the unnecessary dilemma of "Which is best: traditional education or progressive education?"

Actually, there is no dilemma. Both traditionally minded and progressively minded educators *do* have good ideas—if they were just used in the right places. And that brings us to our next point, Lesson 2: Before we look for organizational patterns of effective reading instruction, we need to look at the bigger picture of the total school day.

To begin with, I'd like to suggest that we stop tossing the word "education" around so glibly as most of us are inclined to do. Instead, let us describe what goes on in school simply as schooling. I'd like to propose that schooling has a structure composed of two major elements. The structure of schooling is duolithic; it consists of *training* on the one hand, and *education* on the other. Training is skill-*getting;* education is skill-*using*. Now we can see that if we think first about the total structure of schooling, we will automatically have a structure or organizational pattern for effective reading instruction in both the skill and content areas, and, we will have learned our other lesson from Sequoia, we will not offer only training in reading skills, we will also offer education, or the opportunity for *using* these skills to generate knowledge useful to the learner.

For three centuries in America, traditionalists had the upper hand. Schooling was a drill-filled, fact-packing elimination contest. Schooling was mainly training. Schooling was considered preparation *for* life. "They'd learn how to use their skills once they got out of school." Then came Dewey, with progressive education that emphasized school *as* life. Dewey didn't plan it that way, but now skill-training went out the window in favor of "life experiences" and "problem solving." "They'll get skills when they need them," said the progressives. But they seldom provided the skill-getting opportunity when the child *was* ready. So both traditional and progressive educators flunked the course. Each provided only a half a ration of schooling. Now, however, knowing what we do, we can combine the best of both and provide what the traditionalists demanded—good training, and what the progressives dreamed—good education. Our structure of schooling will help us to offer total, balanced schooling to each boy and girl.

But before we can utilize our structure of schooling to organize effective patterns of reading instruction, we need to get rid of some other superstitions. One is the superstition or perhaps the myth—a myth, you know, is a sugar-coated lie—of homogeneous grouping. For years we tried grouping by I.Q., then by I.Q. and reading test scores, and then the computers began to take over. But no sooner did we get a group of 30 or 40 kids in a reading group than their differences became more obvious than their likenesses! It seems children aren't like milk. They just won't homogenize. (And aren't we lucky!)

Another superstition or gross generalization that seems to be growing is the one that says, "It is better to individualize than to group." Asking the question "Is it better to individualize or group?" is like asking "Is it better to eat or sleep?" The obvious answer is that human beings need both. The question, then, is not *should* I, or should I *not,* individualize instruction. Rather, it is "when should I individualize instruction?" By further analyzing our structure of schooling, we can find the answer to this question and apply it to reading in both the skill and content areas.

Before we go further, shouldn't we ask ourselves, "Just where are we headed?" "What are our goals?" "Why organize for effective schooling and therefore effective reading?" I would like to pose a statement or philosophy to help us think about this. I propose this: It is desirable to structure a schooling situation in which each boy and girl can move as fast and as far as his learning rate and capacity will let him in getting and using the skills he needs toward individual, creative excellence—each unto his own. Because we're dealing here with classrooms of 25 or 30 or more children, and therefore with as many learning levels, I would like to label this statement simply "A Multilevel Philosophy." How far down this road toward individual, creative excellence should each child go? Fortunately, we don't have to answer that question. What's more, we can't answer it. The limits of human achievement are not yet known. Now for our structure of schooling. (*See next page.*)

Our purpose in erecting the structure of schooling has been to find within it some organizational patterns for effective reading instruction in both the skill and content areas or to put it bluntly, "Here I sit with 30 pupils in my classroom. Now what do I do? What should be my instructional pattern: individualized, grouped, or class as a whole?"

As we look down the list of substructures under the training part of schooling, we come to "learning process." A closer examination here will tell us what our organizational pattern for skill-training should be.

In learning a reading skill such as how to recognize—and therefore how to understand—a compound word, the learner goes through a four-step process: stimulus - response - feedback - reinforcement/redirection. The learner must see the words "base" and "ball," make some response, "baseball,"—oral or written—get a feedback (was his response right or wrong), and repeat the process to reinforce his learning by going on to such words as grand/father, work/man, and many

THE STRUCTURE OF SCHOOLING*

Schooling = Training + Education

	TRAINING	EDUCATION
Goals	Efficient skill-getting	Intelligent skill-using
Content	Skill-disciplines: 3 R's, manipulative skills, etc.	Subject discipline: Humanities, Social Studies, Sciences
Structure	A continuum of skills	Facts, methodologies, concepts
Learning Process	S-R-F-R/R	Generation of knowledge; prediction, decision-making
Instructional Process	Individualized, self-programed, laboratory-type	Individual and group projects meaningful to the learner as: a) an individual b) a member of society

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*Don H. Parker, *Schooling for Individual Excellence.* New York: Thomas Nelson & Sons, 1963.

others until he thoroughly gets the idea that "often a word is made up of two little words," and he has learned one of the valuable word recognition skills.

How many such repetitions does a child need to learn a skill? This varies with the learning rate and capacity of each child. Each child is individually different. As far back as 1930, Arthur Gates found that children of 120 I.Q. required about 20 repetitions to learn a word, while the child of 70 I.Q. required 40 repetitions—or twice as many as the brighter child—to learn the same word. Yet, we so often teach children as though they were alike. Even worse, we seem to think that by grouping we eliminate individual differences! With what we know in the behavioral sciences of the psychology of individual differences, developmental psychology, and the psychology of learning, it should be crystal clear by now that the skill-learning must go on in the head of the learner, and it must go on as many times as *he* needs it. Instruction in the training part of schooling must be individualized if we expect the learning process to work and effective skill-training to take place.

Now you say, "Well and good. But how can I organize my classroom so that this learning process will go on in each of the 30 heads of my pupils at once?" The answer: Laboratory-ize. Draw on the new self-programing, laboratory-type learning materials now becoming available, or make your own by cutting up workbooks and using them at many levels to fashion your own skill continuum along which your pupils can move at their own rate. As more and more educational publishers become aware of the need, this kind of material will become more available to teachers and pupils in ready-to-use form.

Now, what about the education part of schooling? Again, our classroom organization will grow out of the learning process involved. Here we are concerned with the generation of knowledge through gathering facts, combining them to form concepts, and deciding how to apply them in a life situation. The main learning process in education is prediction and decision-making. Since our decisions usually involve both ourselves and others, should not practice in decision-making be had in both individual and group situations? If we do believe this, then our classroom organization in the education part of schooling should be both individual and group. Pupils work together on a unit of study, out of which grow individual and group projects meaningful to the learner, involving reading, writing, listening, viewing, discussing, and above all, *doing things.*

How would a real-life classroom look if it were organized according to the structure of schooling we have been discussing? It is not too difficult to visualize. Regular laboratory periods for individualized skill-training are scheduled in each skill area, usually in the morning when minds are fresh. The education part of the day follows with the project work of a study unit in late morning or afternoon, involving planning, generation of knowledge through reading, films, TV, and so forth, applying skills and knowledge in forwarding the group's project and the individual's part in it. During the education part of the day, individual differences would be provided for by having books or other materials about the content of the topic on at least five different reading levels. In a fifth-grade class, for example, materials are needed ranging from about second- or third-grade levels up to eighth- and ninth-grade levels. The result will be an approach to reading in science, social studies, or literature in keeping with our multilevel philosophy. When we make this sincere effort to meet individual differences in learning ability, we will show (not just talk about) our intentions of running an educational program rather than an elimination contest.

How can we organize for effective reading instruction? We have examined a proposed structure of schooling which provides for effective skill-getting and intelligent skill-using. In this supportive yet resilient framework, I believe that the teacher—calling upon all the teaching-learning aids appropriate to the desired learnings—can use the *science* of schooling and the *art* of teaching to bring to our children *schooling for individual excellence*.

3. Critical Reading in the Content Areas

WILL J. MASSEY

For the past decade or two the terms "creative reading" and "critical reading" have been appearing with increasing frequency in the professional literature. There seems to be little agreement among those who make use of these terms. Often the two are regarded as synonymous. Inherent in each writer's concept is "reading between the lines"; i.e., using higher level mental processes to probe beyond the literal meaning of the author's words.

"Critical thinking" is often included in "creative thinking," along with the discovery of implications, inferences, and appreciations of the author's ideas. Research has not as yet delineated all the abilities involved in critical thinking, nor has it shown the most effective way to correlate these abilities with the stages of the child's development.

For the purposes of this paper, "critical reading" will include those processes by which the reader (1) interprets materials —concrete and abstract (verbal), (2) utilizes his previous experiences as objective referents to judge the relevancy, authenticity, sincerity, and utility of the object or the statement, and (3) arrives at a conclusion or course of action.

The critical reader must (1) perceive relationships between words, percepts, and concepts; (2) appraise the author's statements by ascertaining their relevancy to his problem, their authenticity, their objectivity, their agreement or disagreement with statements of other authors or speakers, and their truth or fancifulness; (3) draw inferences from the author's implications; and (4) reserve conclusions until all obtainable facts are perused. In addition, he must not close his mind to further discoveries which should influence his conclusions or courses of action.

Can the teacher develop these skills through effective teaching? A review of the research findings leads to the conclusion that not only *can they be* but that they *must be* developed if democracy is to survive.

A prevailing misconception is that critical thinking is concerned primarily with the effective handling of propaganda. Propaganda exemplifies vividly the need for critical evaluation. However, overemphasis on this kind of writing can result in the neglect of other important aspects of critical thinking which enable the reader to apply critical standards to his choices of thought and action—social and personal.

An Assumption

It may be assumed that the child at any stage of his development may think critically provided he has had adequate experiences, language facility, and opportunities for applying thinking skills. Given the opportunity, as early as the preschool years, he can formulate judgments, distinguish between fact and fantasy (fact and opinion), make comparisons and contrasts, interpret feelings, ascertain relevancy, detect bias, and judge validity. Some examples from literature and social studies will illustrate the possibilities for cultivating skills of critical reading at various stages of the child's development.

Although it is difficult, if not impossible, to isolate the factors involved in critical reading, an attempt is made here to trace the development of skills in formulating judgments and ascertaining the relevancy of information through the various school levels using literature content.

Literature content provides an excellent opportunity for the teacher to cultivate skills of critical reading.

Formulating Judgments

Before the child reads, he can be aided in formulating judgments by such exercises as the following:

1. Something we can sit on is a .... (The child selects from his experience an appropriate word such as *chair, stool,* or *sofa.*)
2. John went wading in the .... (*pool, lake, puddle,* etc.)

In the primary grades, further development of this skill is made possible by exercises which call for judgment. Examples follow:

1. There was a large truck in the Smiths' driveway. Men were putting furniture into the truck. What were the Smiths doing? Watching TV? Moving to another house? Going on a picnic? Moving into the house?
2. The peddler left the Smiths' house with a lighter pack but a thicker billfold.
   The Smiths had bought nothing.
   The Smiths had bought a great deal.
   The Smiths had told the peddler to go away.

At the intermediate level, questions such as the following call for higher level judgments:

1. Could the dog solve his problem as his master did or did he have to accept what happened to him?
2. Does a porcupine shoot his quills?

The junior-high student should be encouraged to make use of his experience—direct and vicarious—to formulate judgments needed in the following situations:

1. Have the child decide which characters from stories read have similar characteristics. Discuss teen-age problems. Then ask such questions as:
   a. Are the problems of these children normal problems?
   b. Do all teen-agers have some of these problems?
   c. Are the solutions that are given to the problems realistic solutions? Why or why not?
2. After the child has read a story about mountaineers, the question: "Do the mountaineers believe in witches?" can be used to cause him to produce evidence for his judgment.

More advanced critical judgment must be required at the senior-high level. Illustrative activities to elicit this kind of thinking are:

1. In what spirit does the author poke fun at the British? Do you think they could be offended by his remarks? Justify your answer.
2. Compare this realistic "Western" with the kind you see on TV. How do the two differ? Which is more likely to be a true representation of the Western movement?

It is apparent that the foregoing examples which illustrate situations calling for formulating judgments also involve comparing and contrasting, distinguishing between fact and opinion, interpreting feelings, etc. They do illustrate, however, the fact that children at all levels can be guided in cultivating this skill at increasingly advanced stages, with increasingly complex concepts.

Ascertaining Relevancy

Prereading experiences which call for the examination of evidence to decide whether it fits the situation may take the form of the following:

1. Have the child tell which pictures belong together. (*dog,* chair, *cat*) (*carrot, beet,* lettuce)
2. To tell time you would use a .... (*clock,* block)

Primary-level exercises such as the following may be used:

1. Cross out the irrelevant statement in the story.
   "I see a big airplane," said Jimmy.
   "See the airplane go up.
   See it come down.
   It can go up and down.
   See the train stop." (Irrelevant)
2. Select the best title for the story:
   a. Christmas in July
   b. The Bicycle Tree
   c. Jody Wants a Bicycle

More advanced skill in ascertaining relevancy is necessitated at the intermediate level. The following activities can be useful:

1. How is this story like another story we have read? How is it different? Why does this story belong in this unit?
2. In comparing the story facts with other data, does this biography agree or disagree with information from other sources?

The junior-high student should be able to ascertain relevancy in these activities:

1. Ask the pupil to indicate which sentences are irrelevant to the plot of the story and why they are not necessary to develop the meaning, although they may add interesting details.
2. What kind of person was ....? Why? Are these good reasons for calling him ....? Do you feel he had good reasons for acting as he did? Cite examples.

More advanced application is called for at the senior-high level in the following types of exercises:

1. Does Poe's analysis of fear in the human mind seem correct, judging from your own experience or from your other reading?
2. What in Section LIV of "In Memoriam" suggests that Tennyson was troubled by the new scientific doctrines derived from evolutionary theories? Is his conclusion on the matter hopeful or despairing?

Critical Reading in Social Studies

Situations which give experiences in another facet of critical reading may be found in the content of social studies. Teachers in this area should capitalize upon these situations to help each child to become more mature in his ability to judge the validity of statements made in his textbooks and elsewhere.

Judging Validity

At the prereading stage the child can be guided into judging the validity of information in situations such as the following:

1. After showing a filmstrip on "The Policeman," the teacher can initiate discussion of the actions of the lost children and the policeman in light of past experiences with a policeman. Does the local policeman help lost children find their parents? Did the policeman in this filmstrip act like a real policeman? Why or why not?
2. Have the child compare "Smokey the Bear" in the National Zoo with the one in the comics:
   Is Smokey a real character? Which Smokey is the real one? How do you know?

The child in the early grades can judge the validity of such a statement as: "On the Plains the Indians lived in teepees because there were no trees to make houses." Consulting other sources and discussing the statement with someone who has visited the Plains States can lead him to accept or reject the statement.

In later grades, the child who finds that the population figure in the text differs from the figure given at the end of the text and consults an encyclopedia, the latest almanac, and other sources is enabled to decide which figure to accept. He compares copyright dates, author's competence, and other pertinent information about the sources in arriving at his decision.

At this level, also, he can be taught to question validity—until he has consulted other sources—of such a statement as:

> "The climate in summer in the Northern Hemisphere is warm. At the same time, the Southern Hemisphere is also warm."

The junior-high student can be encouraged to judge validity in situations such as the following:

1. "The winter of 1962-63 was one of the coldest seasons experienced on the East Coast."
   How many years are involved? Who made the statement? Is he an authority? What factors are involved in the concept "coldest"? (Lowest temperature for a week, a day, a month? Most precipitation, highest humidity, strongest winds?)
2. Is the Lincoln's *Gettysburg Address* that is usually found in social studies books the original? What did Lincoln say when he delivered the address? Who changed it? When? Why?

The student in the high school should be expected to make more advanced inquiry into the validation of social studies materials. The pupil who has read one writer's conclusion that "Integration of races alleviates racial tension," can be helped in questioning the validity of the statement by reading about the "race riot" at D. C. stadium in the fall. He can then be made aware that more than physical integration is necessary to remove distrust, hate, bias, prejudice, and misunderstanding.

He should be given many opportunities to question the validity of information until he has examined all of the available evidence—using his total experience, direct and vicarious—to arrive at a tentative conclusion.

At all levels the pupil needs experience in formulating questions that involve critical thinking. Too frequently, the teacher asks all the questions, formulates the generalizations, and asks the pupil to supply the answers. The teacher should provide assistance to the pupil in evaluating his questions and his answers.

A Final Statement

The examples given above demonstrate the possibility in two content areas (literature and social studies) of cultivating the child's ability in three aspects of critical reading. Space does not permit outlining similar opportunities for the development of other facets of critical reading in each content area. It is hoped that the reader will discern possibilities from the foregoing for his area of specialization and will be encouraged to examine the content of his subject for opportunities that will permit continuous expansion of the student's critical reading abilities.

Realizing that qualitatively the child's thinking processes do not differ from those of an adult, we, as teachers of reading, can do no less than to provide opportunities at all levels for each child to have experiences which call for critical thinking.

4. Developing Reading Competencies Through Social Studies and Literature

I. E. AARON

Reading in social studies and literature involves more than a mastery of basal reading skills. To be sure, the fundamental skills and abilities are necessary for all reading, but each content area demands additional competencies. These competencies grow out of and are peculiar to the subject matter involved.

Reading materials in the social studies and literature are wide and varied. In the social studies, they include textbooks, encyclopedias, newspapers, magazines, biography, fiction with authentic settings, and appropriate reference books. In literature, the pupil reads such materials as literary anthologies, supplementary and enrichment readers, a variety of library books, magazines, reference materials, collections of poems, and short stories.

One of the major problems teachers encounter is helping children to select materials suited to their reading levels. Teachers cannot depend upon one textbook for all pupils in the social studies or in literature. They know that up to one fourth of a typical class at fourth-grade level or above cannot read text or other material written on a difficulty level in keeping with the grade in which they are placed. Before teachers can do much about teaching the specialized skills, they must make certain that the materials are not too difficult.

The remainder of this paper will be devoted to a discussion of some selected specialized reading competencies necessary for effective reading in social studies and literature. Most of the competencies selected for discussion apply to both subject areas. In the discussion that follows the assumption will be made that the pupils being taught the reading skills in social studies and literature are being taught them in materials they *can* read.

1. Mastering the special vocabulary. In reading history, children encounter such words as *citizen, democracy, republic,* and *settlement*. They turn to a selection in geography and meet such words as *island, continent, latitude,* and a host of names of places, many of them difficult to pronounce. They encounter words such as *poem, novel, article,* and *prologue* in literature.

Teachers in social studies and literature are responsible for teaching these special vocabularies. Leaving the development to chance will not get the job done. The teachers must first identify the special vocabulary important enough to be taught. They must next set up situations that will assure the students' learning of the vocabulary, and, finally, they must check to make certain it has been learned.

2. Building adequate concept background. Even though the children recognize the individual words in a paragraph or longer selection, they sometimes are unable to interpret them as the writer intended. The concept load in the social studies and in literature presents problems for some students. We get *from* the printed page in proportion to what we take *to* the printed page. The reader who has the best background, other factors being equal, will get the most from his reading.

The alert teacher of literature or social studies anticipates meaning problems the reader is likely to encounter and helps him to build the background needed for adequate understanding.

3. Reading the specialized materials. Reading a factual discussion about the life of Edgar Allan Poe is quite different from reading one of his poems. Getting the meaning from a book-length novel differs from understanding and enjoying a short story. Reading a geography text and a fable involves some reading skills that are similar, but reading in each type of material also brings into use skills peculiar to that particular kind of reading matter. Purposes for reading each would also differ, thus bringing into play different reading competencies.

Teachers in social studies and in literature have obligations to teach the students how to read their subject matter. The English teacher in the junior high or high school, for example, needs to help the student to understand what is involved in reading a play. Here the reader sets the stage in his own mind. The teacher may ask a good reader to read a poem aloud while the class members listen to the rhythm. Or a symbolic poem may be discussed first from the standpoint of literal meaning and then from the symbolic viewpoint. A civics teacher may suggest a survey, question, read, recall, and reread approach to the text. If there are any best ways of reading the materials, the teacher must teach them to the children.

Among the specialized materials of each subject are the various reference aids in that particular content area. Some of these are common to more than one subject-matter area, while others are limited in their usefulness to one subject field only. Mastering the use of these reference aids leads the child into independence in his reading and studying. Pupils should be taught how to use map and illustrations lists, the card catalogue, encyclopedias, books such as *The World Almanac*, the *Readers' Guide*, biographical dictionaries, the atlas, and any other special reference aids available for their use. Commercial materials for helping the teacher to develop the use of reference materials are now available at most grade levels. However, much of the teacher's instruction in the use of reference aids will come along with actual experience in the use of these aids.

4. Drawing conclusions and getting implied meanings. Getting the literally stated facts is only a part of the job of reading. The good reader in the social studies and in literature can draw intelligent conclusions from the facts, and he can read between the lines. He brings his own experiences with him to the printed page and gets accurate meanings beyond those stated in the selection. The good reader thinks as he reads. He "feels" with the characters in a story and can recognize the relationships between characters.

The pupil reads in terms of the questions he is asked by the teacher. If the questions are strictly factual and involve no real thinking, the pupil will learn to read for facts—and do very little real thinking in which he uses the facts. On the other hand, if the teacher asks questions involving thought along with the facts, the children will think as they read.

When children have been reading to answer factual questions only, they often appear lost if confronted with questions demanding thought. A gradual process must be followed in leading them toward competency in this area.

5. Reading critically. Children sometimes develop the impression that "it's true because it's in print." Such children may grow up to be gullible adults. In a democracy it is extremely important that citizens learn to evaluate that which they read. Reading critically is an instructional goal as early as the first grade. This lays the foundation for critical reading in the social studies and in literature.

Events occurring without plan in the classroom offer some opportunities for developing the ability to read critically, but planned instruction is also necessary. When children discover conflicting statements in different books, or in the same book, and call these to the teacher's attention, a natural situation exists for furthering this all-important ability. However, the questions teachers ask are again important in determining how children read. Lead children into evaluating what they read, and they are likely to continue it into adult life.

The good reader makes use of his experience background to evaluate what he reads. He distinguishes the real from the make-believe and separates fact from opinion. He does not question for the sake of questioning, but he questions in order to be accurate in the information he obtains.

6. Understanding time sequence and the relationship of cause and effect. So much in comprehending the full significance of history depends upon an accurate concept of time and the cause and effect relationship between events. This competency is also important in literature. The time line is a useful technique for charting events in time. This ordering of events in terms of their occurrence aids in understanding the relationship between cause and effect.

Establishing cause and effect relationships goes beyond *who, when, what,* and *where. How* and *why* are involved. The teacher's questions will often determine whether the child considers the *how* and the *why.*[1]

7. Reading maps and globes. Children need to know what maps and globes are and how they are made. Among the many understandings they must develop are the special terms associated with maps and globes (*latitude, longitude, equator,* and the like), the purpose of the grid system, the purpose of a North and South pole, distortions caused by attempting to portray the earth's surface on the flat surface of the map, the legend, the symbols used, and the meaning of the various colors used.

An incidental approach will not get the job done adequately. Lessons should be planned to teach each of these skills, and once competency in map and globe reading is developed, the stage must be set periodically for use of this competency.

8. Reading and enjoying poetry. Children of all ages need to know how to read poetry and to enjoy it. Some classrooms have not given enough time to poetry and, hence, some children do not enjoy it. By selecting interesting and appropriate poems, the teacher can lead even the most reluctant pupil toward appreciation and enjoyment of verse. Children like poems with a strong beat of rhythm and with meanings they can easily grasp. Humorous poems may serve as a starting point for the child or the adolescent who thinks he does not like poetry. The teacher needs a file of poems handy so he can use the appropriate poem at any time.

9. Interpreting figurative language. In the intermediate grades, children encounter more and more instances of words carrying figurative rather than strictly literal meaning. Figures of speech are used both in social studies and in literature. Children often meet metaphor, simile, hyperbole, and personification. They need to recognize these for what they are, to understand their figurative meanings, and to appreciate their value in written and oral expression.

10. Learning to enjoy reading. Enjoying reading, though not a skill, is one of the most important factors in reading. Children may read well from a skills standpoint and still not read unless they are forced to do so. We must teach reading skills in such a manner that enjoyment of reading is not sacrificed.

Parent and teacher interest in reading

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[1] Mildred A. Dawson and Henry A. Bamman. *Fundamentals of Basic Reading Instruction.* Second Edition. New York: David McKay Company, Inc., 1963. p. 271.

govern in large part the development of the child's interest and enjoyment in reading. If parents and teachers enjoy books, children are more likely to enjoy them. The teacher who dislikes reading is not likely to do much toward developing permanent reading interests in others.

In both social studies and literature, reading offers adventure, challenge, information, and enjoyment to the child. We, as teachers, are obligated to help children to get the most from their reading by helping them to develop fully all of the special competencies needed in these two important content areas.

5. Developing Reading Competencies Through Mathematics and Science

Henry A. Bamman

Children and youth in all levels of American schools are being encouraged today to include in their programs of study an increasing emphasis upon science and mathematics. This emphasis has arisen partially because of the strong public interest engendered by modern nuclear discoveries and space developments and partially because of the shortage of personnel for positions in science and mathematics. We have made great strides in developing modern curricula for these two important areas; however, teachers everywhere are increasingly concerned with the lack of reading competencies of young people in both science and mathematics. Despite a strengthening of programs for developing basic reading skills, observable in most schools of our nation, we have made little progress in training teachers to teach specific reading skills for the content areas.

There are several reasons why reading in science and mathematics is more difficult than the reading in which the child normally engages during the first three or four years of his school life. The materials which we use for the teaching of fundamental skills is usually narrative in nature, and the young reader becomes accustomed to description, plot, characterizations, and definite patterns of sentence and paragraph construction. Let us examine some of the reasons why reading for the content areas, such as science and mathematics, is difficult for our students.

1. Ideas are frequently more complex, and there is little control over the *number of concepts* introduced on a page or within a chapter of science or mathematics.
2. The vocabulary is specific to the content area. Very often technical terms are encountered in a specific context and those same terms may not be repeated.
3. In both science and mathematics, the reader is required to relate his previous experience and knowledge to the reading task at hand; concepts are developed on an ascending scale of difficulty.
4. Wide reading, particularly in science, is often demanded from a variety of sources — sources in which the readability may vary dramatically.
5. Inter- and intrarelationships in mathematics and science are numerous and complex. Relationships must be recognized by the reader if he is to understand what he reads.
6. The reader is required to read critically; despite the fact that science and mathematics are regarded as "exact" sciences, the reader must judge the pertinence, authenticity, and value of much of what he reads in these areas.
7. A mastery of study skills (use of graphs, tables and charts; use of reference materials; and the use of textbooks) is essential for efficient reading in these content areas.
8. Finally, a wide variety of materials of different levels of reading difficulty is difficult to obtain for both science and mathematics, particularly in the latter area.

Determining the difficulties. It would be both foolish and impractical to point out the difficulties of reading in content areas unless we could suggest means of improving the instruction in our classrooms. A beginning may be made by assessing the difficulties which our students have in either of the areas of science or mathematics.

Early in the school year the teacher should take inventory of the study and reading skills of the students, as well as ascertain the various students' backgrounds in the content areas. Standardized tests, informal tests and checklists, and discussions may reveal what students' reading and study habits are, what vocabulary has already been developed, and which areas of the curriculum have particular appeal. Further, the teacher should observe the reading of his students in the textbook and watch for obvious signs of difficulties in word attack skills, vocabulary, comprehension skills, and study skills.

Students who are suspected of having difficulty with basic skills should receive additional instruction during the regular reading period; it is not impractical to suggest that much of that instruction should be given through the use of science and mathematics books, rather than the regular developmental reading books. For students in junior and senior high schools, the *Be A Better Reader*[1] texts provide excellent practice materials for developing skills in reading in science and mathematics.

Developing vocabulary. The vocabulary of science and mathematics is often much more specific, more descriptive, than vocabulary found in other content areas. However, the greatest difficulty in learning such specific terminology seems to lie in the inability of many students to apply a term to a process, a classification, or a broad concept. Many words need special attention, since they take on new and different meanings when used in science or mathematics. For instance, the words *product, rate, base, interest, root,* and *literal* are mathematics terms which have different connotations in other areas. Too often writers of textbooks introduce technical vocabulary under the assumption that the simpler phases of the subject have already been mastered by students. Teachers may make these same assumptions, and the responsibility of introducing technical terms and relating them to processes or classifications is definitely a major task for the classroom teacher.

An example of one means of developing vocabulary in science and mathematics, using knowledge of structural analysis, is derived from the Greek and Latin terms for *one*. The Greek *mono* in biology is found in *mono*cotyledon; chemistry, *mono*mer; physics, *mono*chromatic; and in mathematics, *mono*mial. The Latin equivalent, *uni* may be *uni*valve in biology; chemistry, *uni*valent; physics, *uni*ts; and in mathematics, *uni*on. The use of prefixes, suffixes, and root forms may be one of the richest sources of word knowledge in these content areas.

Reading for comprehension. An integral part of reading for science and mathematics is the interpretation of problems, preceded by precise, methodical reading. The student must learn that almost every word is crucial to complete understanding of a problem or a process. Recognizing all the words, applying their specific meanings to the problem at hand, and sensing the relationships among the several conditions which are presented by the problem are prerequisites to actual problem-solving.

Careful questioning by the teacher may determine which students are grasping main ideas and essential details; some students are incapable of seeing relationships among the main ideas and need careful guidance in determining the main ideas and their supporting details. Students benefit from opportunities to restate main ideas in their own words and to state essential sequences of ideas. Listening and speaking become an integral part of good reading when the teacher involves the student in stating clearly and succinctly the ideas that have been encountered in reading.

Too often students are requested to work problems or perform experiments before they have carefully read them; efficient problem-solving is dependent upon deliberate, careful reading. The following suggestions will help:

1. Read the problem carefully,

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[1] Nila Banton Smith. *Be A Better Reader*, Books I-VI. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1959.

2. Reread it and determine what it is about (main ideas),
3. What are the conditions (details)?
4. What, exactly, are you asked to find? Do?
5. What is the order in which the conditions of the problem should be used?
6. What processes are required?
7. What is a reasonable answer?
8. Perform the necessary steps, compare with the estimate, and reread the problem if the answer seems unreasonable.

Rate of reading. So many of our students have been made aware of the necessity for reading rapidly. The amount of reading to be done in each day's work is increasing with each generation, and the availability of a wide variety of supplementary materials for each content area has emphasized the necessity for selecting wisely, skimming, and reading intensively. The student who reads science and mathematics must be prepared to make adjustments to the basic materials, both in terms of his speed of reading and his purpose for reading the material.

Reading in these content areas is often slow, deliberate reading. Skimming is seldom applicable as a skill, except in searching for related ideas. Directions must be read and reread, with attention directed toward the sequence of those directions and exactly what is demanded by each. Fortunately, many of the concepts of science and mathematics are both observable and demonstrable; many of the ideas are precise and easy to relate to laws and principles.

Making assignments. Certainly the idea of making a good assignment is not unique in science and mathematics. So much of what a student learns from day to day is dependent upon *how* a teacher assigns the work to be done. As it has been stated, there is a definite scale of difficulty in the curriculum of mathematics and science. Each new concept is built on previously developed concepts. Our students frequently do not establish essential relationships; they work from day to day, with little awareness of the effect of previous learning upon today's understanding of new ideas.

A major role of the teacher is to help students relate what *is* to be learned to what *has* been learned. Assignments in textbooks and related materials should include a careful statement of relationships, a review of what has been learned, and predictions of what is to be accomplished through further reading.

Mapping out a textbook or a chapter for a student is like preparing carefully for a trip. Hours of wasted energy and backtracking may be obviated by a carefully stated assignment, in which both students and teacher are involved.

Use of diversified materials and activities. Classroom teachers are certainly aware that our textbooks are not appropriate for all of the students in a class. This problem is compounded at higher levels of education, particularly in the junior and senior high schools, where the use of a single text is prevalent in science and mathematics classes, and where the range of reading abilities of the students may range all the way from third-reader level to the level of a mature adult.

Fortunately, the unit or project plan of teaching makes possible the diversity of materials, both in terms of interests and reading abilities of the students. A textbook is less essential when a broad unit is developed. However, in mathematics we are constantly confronted with the problem of a single textbook and virtually no supplementary reading materials. As a result, we must diversify the activities in terms of the abilities of the students. Oral reading of problems, discussions of problems, and numerous teaching aids are necessary if we are to involve all students in solving the problem at hand. Recent developments in materials for the teaching of mathematics have incorporated the use of multisensory approaches to learning.

Summary. Teachers and students in science and mathematics classes are involved in two vital processes: the development of knowledge of specific content, and the development of skills for lifelong acquisition of knowledge.

F. Evaluation in Reading

1. The What and Why of Levels of Achievement

MARJORIE SEDDON JOHNSON

Miss Waters, can I read this book or is it too hard for me? Is Bill really doing as well as he should in reading? Can you suggest some books we might buy Susie for her birthday? Is Ed doing as good a job in reading as the rest of the class? In which reading group do you think I should put Ellen? Why does Bart always pick library books that are too easy for him? These and myriad other questions reflect the concern of pupils, teachers, parents, and librarians with levels of achievement. They also reflect some mistaken ideas about meaning and evaluation of various levels of achievement.

Basic Concerns

Under the surface of these questions there appear to be a few fundamental matters of concern which should guide all thinking about evaluation of performance in reading. First, how does each student's current achievement stack up against his potential? Is *he* doing as well as *he* should do? Second, how does his performance compare with that of other children of his age? Where is *he* operating in comparison with *others* of his class group? Third, what kind of material could he successfully read on his own? What is his *independent* reading *level?* Fourth, what kind of material should be used in his instructional program so that he can have a challenging and profitable learning experience? What is his *instructional level* in reading? Fifth, how successfully can he evaluate his own performance? Has *he* established realistic standards? Sixth, how much agreement is there among various evaluations of his level of functioning? How do different *estimates* of his achievement *vary?*

Potential and Actual Achievement. Evaluation of the adequacy of any student's current level of functioning is truly meaningful only against the yardstick of his potential level. To have each individual functioning at the highest level he is capable of reaching has long been one of the stated aims of education. The child of superior intelligence should, therefore, be achieving at a level far above the average. The child of low intelligence cannot be expected to reach the level of the "average" child. The 12-year-old with an I.Q. of 80 is doing as well as he should be doing if his achievement is comparable to that of an average nine and a half year old. The 12-year-old with an I.Q. of 120, on the other hand, should be expected to achieve at a level comparable to that of the 14½-year-old.

In terms of reading levels, let us assume for the moment that the "average" child is expected to be ready for instruction with materials designed for his normal grade level. The "average" sixth grader, then, would be expected to be ready for instruction at sixth-reader level. If he is not, he would have to be considered retarded in reading. The child of normal age for sixth grade, but with an I.Q. of 80 would not be expected to be ready for instruction at sixth reader. He could not be considered a retarded reader because he was not reading "at grade level." In fact, if he were ready for instruction at fourth reader, he would be doing very well and, in terms of his capacity, would be an achieving reader. The sixth-grade child of I.Q. 120, however, would be retarded in reading if he were ready for instruction only at sixth-reader level. His potential for achievement is such that he should be able to profit from instruction at about eighth-reader level. Unless he is functioning at this level, he is not working up to capacity and must be considered a retarded reader.

Evaluation of reading achievement designed to determine whether or not the child is doing as well as *he* should must be made against absolute standards. The question cannot be "Can he read this material as well as most other children?" It must, instead, be "Can he read this material adequately?" according to accepted standards of adequacy of performance. This is the kind of measure usually made by the various types of informal reading inventories. One must have not only the evaluations of his reading performance, but, for the sake of comparison, a reliable measure of his general capacity. In the final analysis, this usually means a good individual test of intelligence. The classroom teacher, when such an evaluation is not available, can at least be sure of this: if the child can deal adequately with a piece of material which is read to him, he should be able to read it himself. If he cannot, there is a gap between his achievement and his potential for achievement. He is retarded in reading.

Individual and Group Achievement. In the light of the preceding definitions of retardation, comparison of a child's performance in reading with that of his age peers seems of relatively minor importance. It is obvious, nonetheless, that this type of evaluation goes on constantly and sometimes is the only kind of evaluation used. Parents who have not been educated to judge their child's performance in terms of his capacity have no other criterion to use. They seem happy if Johnny is one of the best in his group and distraught if he is not. Too often the erroneous assumption is made that each child could be one of the leaders of his group if he were just so inclined.

Standardized tests give a rating of performance by comparing what a child has done with what others have done on the same task. School marks often use the same approach to evaluation. In neither case does the child's capacity enter into the rating.

Two equally bad effects can result from exclusive use of this kind of evaluation. First, the child of low capacity may live under the constant frustration of failing to meet impossible goals. Second, the child of high capacity may come to expect nothing more of himself than that he do a little better than the average child. In both cases the outcome will probably be that the child will not do as well as he is capable of doing.

If the individual's achievement is to be measured in this way, real knowledge of the meaning of the results is necessary. Too often misinterpretation results from lack of understanding of the ratings. In the classroom the assumption is too frequently made that a sixth-grade score on a standardized test means adequate achievement with materials designed for sixth-grade use—sixth readers. This is not the case. It merely rates him as doing as well as those average children in the standardization population who were at that same point in the sixth grade. This may be interesting information, but it is not especially revealing in terms of how well he is using his capacity for achievement or of how his instructional program should be planned.

Level for Independent Reading. Of particular importance to the child himself as he selects a book, his parents as they choose books for him, the librarian as she aids him in finding materials, and the teacher as she suggests reading matter is the appropriate level for independent reading. What materials can he read successfully without help? At what level can he function with virtually 100 per cent efficiency with no instructional guidance? Certainly this kind of functioning is what is demanded in independent reading. If there is a need to ask for help with words, do arduous analysis of unfamiliar words, read and reread to understand ideas, ask about the meanings of words or phrases, or struggle to retain ideas, this level of functioning has not been reached. Minimum criteria which have been established call for at least 99 per cent word recognition and 90 per cent comprehension if the individual is to be considered truly independent.

Many factors can influence the degree of independence an individual shows in reading particular material. In addition to the commonly considered factors such as vocabulary and structural difficulty of the material, many others such as the ideas it presents, the individual background of experience, the amount of interest in the subject matter, etc., all must be taken into account.

Wide reading of this practically effortless type is what leads to real fluency. Opportunities to do such reading should be provided regularly within the classroom as well as in the rest of the child's life. It is through this kind of reading that the child really becomes a reader, a person to whom reading is an integral part of his way of life. Unless there is knowledge of his independent level and the child has a chance to select and read appropriate material on his own, he is apt never to develop into a real reader.

Level for Instruction. If increasing higher achievement in reading is to come about, knowledge of the child's instructional level is essential. Teaching done at a level where the child meets no challenge cannot be profitable. If he is independent in his handling of the material, he has virtually nothing to learn about it through teaching. Teaching done at a level where the child is really frustrated or meeting insurmountable difficulties will be equally unprofitable. He has so little solid foundation from which to work and so much to learn that learning becomes impossible for him.

As with the independent level, definite criteria have been established for the instructional level. It has been found that conditions for learning appear to be most advantageous when the child receives instruction in materials in which he can recognize 95 per cent of the words and achieve 75 per cent comprehension. In this situation he can, through the teaching provided, learn to overcome whatever difficulties he has in comprehension or word recognition. He can become independent in handling the material. The object of instruction should be to enable the individual to read the material independently.

More must be known about the child than merely the proper level for instruction. One must also know what specific strengths and weaknesses he has. However, no analysis of needs without attention to the levels on which they could be met would be a sufficient basis for plans for the instructional program.

The Child's Standards. Our ultimate aim of instruction in reading is certainly to enable the child to evaluate his own performance realistically. He should come to know when he is doing a good job and when he is doing an inadequate job. When he is not really understanding the ideas, he should be dissatisfied. He should be content with his reading only when it is fluently done and accomplishes the purposes for which he is doing it.

Children internalize the standards of those whose evaluations are important to them. If the child reads with many errors —repetitions, substitutions, omissions, etc. —and is then told he did a good job, he comes to believe this is a good job. He establishes very low standards in terms of accuracy of word recognition. Suppose the child finishes his reading and can do nothing more than parrot back a few words and give a vague idea of the import of the article. If he is told he did well, then spongelike and superficial thinking becomes his idea of a good job. He establishes very low standards in terms of comprehension. He knows nothing of the satisfaction of thorough understanding; therefore, he cannot set this as a standard for good performance.

As an independent individual then, he will never strive for high accomplishment. He will feel he is doing quite well if he produces a low-level end product. He will never learn, unless by accident, what it really means to read a book.

Variability in Evaluations. Estimates of achievement based on different standards are bound to differ. Independent and instructional levels determined according to the criteria presented earlier may not have any direct relationship to standardized test results or to teacher or parent evaluations. It is obvious that, if ideas about an individual's achievement are to be communicated, there must be real specificity about the standards of judgment which are being used. To say that a child scored at a particular level really means nothing unless we know what the measuring instrument was. Almost any technique devised for evaluation of reading achievement can be useful in some way, but only to a person who understands it. Blind acceptance of a test result as somehow vaguely descriptive of the child's achievement can be nothing better than extremely dangerous.

Conclusion

This brief overview has had two major purposes: to establish what is meant by levels of achievement and to point out the importance they have in the child's reading growth and development. Primary emphasis has been placed on judgment of the child's achievement in comparison with his own potential for achievement. Within this context, certain ideas seem particularly deserving of attention.

The What. Of all the information about a child's level of achievement, two items appear to have special significance. The first is the level at which a child is able to perform successfully without aid or guidance—his independent reading level. The second is the level at which he can most profitably be taught—his instructional reading level. Measures of his comparative ranking with other readers assume more "incidental information" value than practical value.

The Why. There are three outstanding reasons for knowing the child's independent and instructional levels. First, suitable materials can be made available for his independent reading. Second, an appropriate instructional program can be planned and executed. Third, the child will have an opportunity to develop realistic standards for evaluating his own performance. In short, optimum conditions can be established for his developing good reading ability and accepting reading as an integral part of his way of life.

2. Tests for Evaluating Achievement Levels in Reading

Jules C. Abrams

One of the most important responsibilities which faces the teacher is that of determining the best method to use in appraising the levels of reading achievement of the children in his classroom. To begin with, the difficulties encountered in measuring the mental traits of human beings often seem insurmountable even to the psychologist or the statistician especially trained to do this. It is one thing, for example, to determine how much is the distance between two lines, but it is quite another thing to assay the competence of a child as he copes with a typical silent reading situation. It is one thing to compare the heights and weights of different children; it is an infinitely more complex matter to evaluate the extent and breadth of a child's reading comprehension.

In measuring human traits, we are forced to deal with much greater variability than in the physical sciences. For example, there may be variations in the speed of sound caused by changes in atmospheric conditions, but the variations will be slight. On the other hand, in a typical fifth-grade classroom, the reading abilities of the children may easily range from primer to eighth-grade level.

Still, if we are to achieve the goals or objectives of reading instruction, and, just as importantly, if we are going to be able to appraise the results of our teaching methods, these difficulties must be overcome. It necessarily becomes our responsibility to determine where the child is functioning. More specifically, we must appraise (1) how well his current achievement in reading compares with his intelligence level; (2) how his performance in reading matches up with the performance of other children of his age; (3) what level of material he can be expected to read on his own and where he will most profit from instruction (not to mention where he will be frustrated by the complexity of the material); and (4) how well he can evaluate his own performance and be aware of his own deficiencies.

Informal Evaluations of Reading Achievement

For a considerable number of years now it has become generally accepted that the answers to most of the questions stated above can best be elicited by the intelligent use of informal inventories. These instruments can help teachers in a number of different ways. Generally, if used properly, they will evaluate the specific levels of reading achievement (independent, instructional, frustration, and capacity). They will also supply abundant evidence as to the particular strengths and weaknesses in the pupil's reading ability. Still further, they aid in promoting learner literacy—that is, help the pupil himself to become more aware of his reading growth and the problems he has yet to overcome. All in all, if teachers make skillful use of informal measures of reading achievement, they will be in much better position to group children more efficiently, to concentrate upon areas of reading difficulty which need greater attention, and to stimulate the learner as he becomes more alerted to his own progress.

Classroom Evaluation with Informal Inventories

Although an individual informal reading inventory is by far the more diagnostic and can provide much greater information, from a practical standpoint it is difficult to administer to every pupil because of limitation of time. For this reason the classroom teacher, at least initially, must rely upon group informal reading inventories. It should be kept in mind that the teacher from the outset has certain information at his command even before the group inventory is administered. Results gleaned from cumulative records, results of standardized tests, etc., provide the teacher with a rough estimate of the child's present reading ability. The group inventory, itself, then starts with material of a known level of difficulty to be used on a trial basis. The teacher's primary aim is to determine whether this material is at a level suitable for instruction, above the instructional level, or below the instructional level for each child in the group. At the same time, the direction of the activity provides for a structured situation in which additional observations can be made. At least some information can be obtained on the general language development, the background of experience and information, the stage of development in word recognition and comprehension abilities, as well as the child's ability to function in a group situation.

The procedure followed in assessing children's reading ability through a group inventory follows a systematic pattern which nevertheless must be flexible if most efficient results are to be obtained. The first step is the readiness period during which group discussion is stimulated. The teacher guides the discussion to some extent, but at the same time allows sufficient freedom so that the pupils can reveal themselves with regard to interests, concepts, vocabulary, experiences, etc. The emphasis should always be on terms and expressions from the material to be read in order to determine the pupil's reaction to them or ability to deal with them. The second step is the silent reading, the major purpose of which is to determine if the pupil is able to read material at this level and accomplish his purpose for reading. The teacher must now be on the alert for any signs of difficulty such as request for help, lip movement, vocalization, finger pointing, etc. As the teacher gives immediate aid to those children who need it, he can spot specific weaknesses as well as determine how well the child can apply word recognition skills and comprehension abilities. The third step consists basically of more extensive evaluation of the child's reading abilities. Here, by having the children discuss what has been read and by the further use of intelligent questioning, the teacher is able to determine whether the pupil's reading ability is adequate for satisfaction of the original purposes for the reading. At the same time the pupils are stimulated to establish purposes for silent or oral rereading. This provides an opportunity to evaluate skills in locating information as well as a direct appraisal of oral reading performance. In the final phase of the group reading inventory, the so-called follow-up period, the previous steps outlined above are carried out with easier material for pupils for whom material of the original inventory was at too high a level, and more difficult material is employed for those children for whom the original material was not at a high enough level to be challenging.

Individual Informal Reading Inventories

Although the group reading inventory provides a valuable instrument for determining levels of performance in reading, a much more thorough and diagnostic method is to appraise the performance of each pupil individually. Often the teacher will signal out those children who have shown particular weaknesses on the group appraisal to evaluate with the more searching and insightful individual inventory. In essence this procedure consists of having the child read orally at sight and then silently from a series of reading selections which increase in order of difficulty. During the oral reading at sight, the teacher makes a detailed recording of the child's performance. Such things as omissions, substitutions, insertions, repetitions, etc., are duly noted. In addition, the teacher should be alerted to the phrasing of the reader, the voice control, possible speech defects, etc. As the child reads silently, the teacher notes any evidence of lip movement, subvocalization, etc., as well as recording the rate of reading. Since reading is never simply a matter of recognizing words, comprehension of both the oral and silent reading selections are checked by means of factual, inferential, and vocabulary-type questions. Finally, the ability of the child to locate information and to improve the quality of his oral reading performance after initial silent reading is appraised.

While there is a great deal of information which can be acquired by employing this inventory, probably the most important knowledge obtained is that of the different achievement levels. For example, it is extremely important that the teacher distinguish between the child's *independent level*—where he is able to read on his own—and his *instructional level*—where he can profit most from instruction. At the *independent level* the child is expected to make no more than one error in 100 running words, and to maintain a comprehension score of 90 per cent or better. At the same time he should show freedom from such symptoms of difficulty as finger pointing, lip movement, etc. At the *instructional level* the child should make no more than one error in 20 running words, and maintain a comprehension of at least 75 per cent. There should be relative freedom from symptoms of difficulty. The child will be considered to be at his *frustration level* when his word recognition drops below 90 per cent (more than one error in every ten running words), or his comprehension is less than 50 per cent.

The *hearing comprehension or capacity level* of the child can be appraised as part of this inventory by reading selections *to* the child and then checking his comprehension. The child is considered to have adequate capacity for reading at a particular level if his hearing comprehension score is 75 per cent or better, and if his oral language level is comparable to the language level of the material. By then comparing the child's instructional level with his capacity level, we are able to get at least an approximate estimate of the amount of retardation in reading, or to put it slightly differently, how his current achievement compares with his potential level.

Standardized Tests of Reading Achievement

Informal reading inventories, although very diagnostic, are dependent to some extent upon the experience and competence of the examiner. Individual inventories are sometimes impractical because of time requirements. They only indirectly yield information as to how the performance of the pupil compares with other children of his age. This then becomes the major purpose of the standardized test—to compare the reading achievement of one child with his peers, or, more accurately, to compare a class's level with the national norm. The standardized test can also be of value in discovering the range of reading ability in a class or school, in determining the range of achievement in certain phases of reading, and in measuring the amount of gain resulting from instruction. (The latter is valid only when group performances are compared—individual gains and losses may be meaningless because of statistical limitations.)

Summary

Although the appraisal of mental traits is difficult it is absolutely essential that this be done because of the necessity of adapting our reading instruction to fit the individual needs of students. Any teacher who is aware of individual differences will recognize the advantages of informal inventories. Standardized tests are also of value in comparing the child with his group, but the limitations of these tests must always be borne in mind. The most judicious teacher will use all three methods intelligently to fit the particular needs of his pupils.

3. Current Information on Achievement Levels in Reading

GILBERT SCHIFFMAN

The basic responsibility of the public school is to attempt to educate each pupil to the full extent of his capacity. In order to carry out this philosophy, it is often necessary to provide special services and programs for the pupils with problems which cannot be handled within the regular classroom. For a multitude of reasons, there are pupils within any system who are not reading at a level in keeping with their capacity. Ideally, these pupils would be identified and remediated in the regular classroom by proper grouping and instruction. However, from experience we know this is not always possible or practical. For many of these children it is necessary that special reading programs be available at the elementary and secondary level to supplement the developmental program.

Recently Baltimore County has taken the time to evaluate some of the merits and weaknesses of their 81 corrective reading programs. One of the major problems appears to center around communication between the classroom teacher and the special reading teacher concerning the appropriate reading levels of the corrective pupils. Very often these children use basal readers at one level in the regular classroom and read books at another level in the corrective reading program.

Another problem centers around the early identification of reading disabilities. Results of a four-year survey involving over 10,000 pupils indicate the tremendous advantage of early remediation. It appears that pupils with reading disabilities identified as early as the second grade have over ten times as great a chance of being remediated in a prescribed period than a comparable disability detected in the ninth grade.

Emphasis must be placed upon early identification and placement in the proper program before an individual's problem becomes too complex. Waiting for the child to be 1½ or two years retarded in reading according to standardized tests precludes early identification. No longer can we afford to wait for the child to be referred to special services only after continual academic failure, or because of atypical behavior or overaggressive parents.

In order to analyze this difference of opinion, an attempt was made to compare the instructional reading level as determined by the corrective reading teachers' use of informal tests (WR, IRI), standardized reading scores, and readability levels of assigned texts used in the classrooms.

Summary of Results—Figure 1

Elementary Level:

1. The grade level of the standardized tests averaged .41 grade level over the readability level of the assigned texts.
2. Readability level of the assigned texts averaged 1.15 grade levels over the instructional levels as determined by informal evaluations.
3. The grade level of the standardized tests averaged 1.52 grade levels over the instructional levels as determined by informal evaluations.

Secondary Level:

1. The readability level of the assigned texts averaged 1.35 grade levels over the grade level of the standardized tests.
2. The readability of the assigned texts averaged 2.24 grade levels over the instructional levels as determined by informal evaluations.
3. The grade level of the standardized tests averaged 1.26 grade levels over the instructional level as determined by informal evaluations.
4. The average readability level of content texts (history, science, social studies) averaged 3.24 grade levels over the instructional level as determined by informal evaluations.

This data supporting the inconsistency among the standardized tests, book level scores, and informal evaluation is not new. Botel stated in 1957* "Seven to ten million pupils in our schools are reading books which are too difficult for them."

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*A paper delivered at the 1957 Frontiers of Elementary Education Meeting at Syracuse University.

Figure 1

An Investigation of Standardized Test Results, Informal Evaluation and Readability Levels of Classroom Assigned Texts for 697 Elementary and Secondary Corrective Retarded Readers

Figure 1a

	Standardized Test Results Are:					
	Higher		Same		Lower	
	Elem.	Sec.	Elem.	Sec.	Elem.	Sec.
Readability Level of Assigned Books	66%	37%	7%	0%	27%	63%
Instr. Level determined by Informal Evaluation	100%	75%	0%	0%	0%	25%

Figure 1b

	Readability Level of Assigned Texts Are:					
	Higher		Same		Lower	
	Elem.	Sec.	Elem.	Sec.	Elem.	Sec.
Standardized Test Results	27%	63%	7%	0%	66%	37%
Instr. Level determined by Informal Evaluation	83%	86%	17%	7%	0%	7%

Betts in his classic text *Foundations of Reading Instruction* commented that standardized tests of reading rate retarded readers one to four grades above their manifest achievement level.

The commission on Evaluation in Reading of the IRA decided to investigate this problem.

A pilot questionnaire was distributed throughout the state of Maryland. It was felt that Maryland—with only 24 counties—would be an ideal testing area. Two questionnaires were sent to each county in the state—one to an elementary supervisor and one to secondary personnel. Twenty-one out of 24 counties replied. Additional copies (422) were filled out by elementary and secondary teachers attending two IRA reading conferences.

Breakdown—distribution of forms:

Group A: 230 Elementary classroom teachers attending 2 reading conferences
Group B: 192 Secondary classroom teachers attending 2 reading conferences
Group C: 20 Elementary supervisors, one from each of 20 county office staffs
Group D: 21 Secondary supervisors, one from each of 21 county office staffs

Summary of Significant Results—Figure 2:

1. 72% of secondary teachers have never attended a course in reading or related subjects.
2. Elementary and secondary representatives of the central office staff of 83% of the counties in Maryland agreed on the general definitions of independent and instructional reading levels. However, very few of the secondary personnel indicated specific standards or criteria in defining these levels.
3. The majority of the four groups do not consider reading up to capacity or reading up to grade level as necessary criteria for promotion. However, 42% of the elementary teachers did consider reading up to capacity an important criterion.
4. The majority of the elementary central staff listed specific word recognition and comprehension criteria for the independent and instructional reading levels.
5. Only a very small percentage of the four groups depended solely upon standardized or informal tests in determining the levels.

Figure 2

Percentage Distribution of Response of Teachers and Central Office Staff to Questionnaire

	Elementary Teachers	Secondary Teachers	Elementary Central Staff	Secondary Central Staff
No Specific Courses in Reading	30%	72%	0%	20%
Grade Level in Reading Necessary for Promotion	8%	0%	0%	0%
Reading Up to Capacity Necessary for Promotion	42%	26%	30%	0%
General Definition for Independent Reading Level*	69%	87%	100%	100%
General Definition for Instructional Reading Level**	71%	90%	100%	100%
Specific Word Recognition Criteria for Independent Level	40%	24%	20%	0%
Specific Word Recognition Criteria for Instructional Level	2%	16%	0%	0%
Specific Comprehension Criteria for Independent Reading Level	0%	7%	0%	14%
Specific Comprehension Criteria for Instructional Level	0%	2%	10%	14%
Specific Word Recognition and Comprehension Criteria for Independent Reading Level	8%	0%	60%	14%
Specific Word Recognition and Comprehension Criteria for Instructional Reading Level	11%	6%	90%	33%
Use of Informal Tests Only in Determining Independent Level	8%	4%	10%	0%
Use of Informal Tests Only in Determining Instructional Level	1%	4%	10%	0%
Use of Standardized Tests Only in Determining Independent Level	0%	0%	0%	0%
Use of Standardized Tests Only in Determining Instructional Level	13%	0%	0%	0%

Independent Reading Level: The optimum level at which the reader can function without assistance—recreational reading.

***Instructional Reading Level:* The optimum level at which the reader can benefit from instruction.

Figure 3

A Comparison of the Methods of Determining Capacity Level by Teachers and Central Office Staff

METHODS OF DETERMINING CAPACITY

Group	All Methods Group, Indiv. Tests, and Teacher Judgment	Teacher Judgment Only	Group Tests Only	Other Combinations
Elem. Teachers	65%	17%	13%	5%
Sec. Teachers	31%	20%	41%	8%
Elem. Central Staff	70%	3%	10%	17%
Sec. Central Staff	43%	2%	40%	15%

Figure 4

A Comparison Between Standardized Test Results and Other Methods of Evaluation for the Four Groups

Standardized Test Results Are:

	Elementary Teachers			Secondary Teachers			Elem. Central Staff			Sec. Central Staff		
	Higher	Same	Lower	Higher	Same	Lower	Higher	Same	Lower	Higher	Same	Lower
Independent Level as determined by Informal Inventories	19%	56%	25%	100%	0%	0%	75%	0%	25%	60%	0%	40%
Independent Level as determined by Teacher Judgment	33%	33%	33%	83%	5%	12%	38%	38%	24%	28%	72%	0%
Independent Level as determined by Pupil's Judgment	25%	75%	0%	28%	3%	69%	17%	50%	33%	0%	17%	83%
Instructional Level as determined by Informal Inventories	70%	15%	15%	89%	4%	7%	72%	14%	14%	25%	50%	25%
Instructional Level as determined by Teacher Judgment	17%	66%	17%	65%	5%	30%	38%	38%	24%	25%	50%	25%
Instructional Level as determined by Pupil's Judgment	33%	33%	33%	40%	4%	56%	17%	50%	33%	20%	67%	13%
Frustration Level as determined by Informal Inventories	55%	0%	45%	44%	28%	28%	56%	33%	11%	20%	40%	40%
Frustration Level as determined by Teacher Judgment	46%	28%	26%	71%	5%	24%	37%	63%	0%	21%	50%	29%

Figure 5

A Comparison Between the Four Groups in the Current Placement of Pupils for Instruction

Current Placement of Pupils for Instruction Is:

	Elementary Teachers			Secondary Teachers			Elem. Central Staff			Sec. Central Staff		
	Higher	Same	Lower	Higher	Same	Lower	Higher	Same	Lower	Higher	Same	Lower
Instructional Level as determined by Informal Inventories	71%	0%	29%	70%	26%	4%	50%	42%	18%	0%	83%	17%
Standardized Test Score	49%	26%	25%	28%	54%	18%	50%	42%	18%	68%	32%	0%
Word Recognition Performance Level	0%	25%	75%	60%	2%	38%	17%	50%	33%	33%	67%	0%
Comprehension Performance Level	33%	0%	67%	34%	52%	4%	0%	67%	33%	18%	82%	0%

Summary of Significant Results—Figure 3:

1. Elementary personnel place more value on the combined evaluation of group and individual tests and teacher judgment than secondary personnel in determining capacity.
2. Teachers placed more value on teacher judgment than central office staff in determining capacity.
3. Secondary personnel utilize group tests more often than elementary personnel in determining capacity.

Summary of Significant Results—Figures 4 and 5:

1. The majority of secondary teachers and central office personnel agreed that standardized test results are higher than independent level as

determined by inventories. However, 40 per cent of the secondary supervisors and 25 per cent of the elementary supervisors felt that standardized test results are lower than the informal scores.

2. Both groups of teachers and the elementary supervisors agreed that standardized test results are higher than the instructional level as determined by informal inventories.
3. Only the secondary teachers felt that standardized tests results are higher than the independent and instructional levels as determined by teacher judgment.
4. The four groups did not agree on any one point.
5. The central office staff indicated that the current placement of pupils for instruction was higher than standardized test scores. 49 per cent of the elementary teachers agreed. However, 32 per cent of the secondary central office staff agreed with the secondary teachers that the results were the same.

No attempt will be made at this time to evaluate the total results of this survey. It is expected that an improved and expanded questionnaire will be developed and distributed to a random sample of the IRA members across the country. The data will then be placed on IBM cards and an extensive analysis will be conducted. It is hoped that the commission will have a detailed report for the 1964 meeting in Philadelphia.

This type of descriptive research is in itself not too important. What we do with the results, what new hypothesis, what new avenues of research and experimentation, and what unanswered questions and controversies arise from the statistics are the real measures of the worth of this survey.

G. *Research in Reading*

1. What Questions Does Reading Research Ask?

THEODORE L. HARRIS

The general topic proposed for this session, "Needs and Deeds in Reading Research," is clearly evaluative in intent. It suggests such questions as "What has been done?", "What is being done?", or "What should be done?" in reading research. In a very real sense this is an impossible task partly, among other things, because of the growing volume of research in reading, currently well over 100 published studies per year, and partly because of differences in the value systems which any discussant would bring to such a topic.

Nevertheless, the questions implied by this topic merit consideration. I propose to examine only one aspect of the general topic by inquiring, "What questions does reading research ask?" It is my hope that some assessment of the questions we have asked, are now asking, and might ask in future research in reading will stimulate thoughtful discussion and constructive action.

I would argue that the prime requisite of research in any field is that it asks a significant question. Research will of course be more or less definitive insofar as it identifies and controls significant variables and uses a methodology appropriate to the task. Yet we should clearly recognize that methodology is a means to an end, the end being, hopefully, some answer to an important question. A question may not be fully or completely answered in a given research study, but if it is a significant one it may set in motion other research so that ultimately a major question may be more satisfactorily answered. Such is the history of most research of recognized value. On the other hand, if the question asked is trivial, not clearly defined, fragmentary, or purely routine, the most sophisticated methodology will not transform such a study into an important contribution to research. Having made this point, which I trust is obvious, I shall not pursue the question of methodology further.

I would further argue that it is imperative today for those of us interested in reading research to look to the questions we ask as well as to our methodology. This is simply because the nature and quality of educational research is currently under a withering attack by responsible social scientists in the educational field. Professor Arthur Jensen, for example, writing in the October, 1961, *Teachers College Record,* quotes Percival M. Symonds, former president of the American Educational Research Association, to this effect: "One may be impressed by the output of published reports of educational research, but, frequently, a closer inspection leaves disturbing doubts as to quality."[1] Later, after discussing the inevitability of a certain number of "failures" even in well-conceived research, Professor Jensen goes on to say:

> But there is another kind of failure, of which education has had more than a fair share—the "safe" project in which the variables under study are so trivial, local, and unreliable that, even when the research goes exactly as planned, the results and conclusions neither answer nor give rise to any fundamental questions.[2]

These men, and others today, stress the need for a more "basic" type of educational research which, as Professor Virgil Herrick has remarked, permits "generalizations of consequence and control rather than ones of fact." Each is careful to acknowledge the presence of a body of significant research in education, but deplores the small proportion, relative to the total output, of educational research which yields consequential generalizations.

It seems relevant, therefore, to examine the types of questions asked in reading research even though this examination may make us all a bit uncomfortable. Let us begin with research in the past.

Questions Asked in Past Reading Research

Professor Russell has provided a useful guide to reading studies in the past "which have widely influenced reading instruction over the years."[3] The questions asked in nine of the more specific of these "classics" may be loosely paraphrased as follows: "What is the effect of different purposes and materials on reading habits?" (Judd and Buswell); "What is the relation between the eye and voice in oral reading?" (Buswell); "What comprehension errors do children make in reading paragraphs?" (Thorndike); "What is the nature and pattern of children's reading interests at different ages?" (Terman and Lima); "What is the historical pattern of American reading instruction?" (Smith); "What variables enter into the readability of a book?" (Gray and Leary); "What are the effects of varied amounts of phonetic drill on primary reading?" (Agnew); "What is the relation between reading interests and various facets of personality revealed in case studies?" (Strang); and "What is the status of reading instruction and literacy in the world?" (Gray).

In commenting on these studies, Professor Russell notes the variety of problems studied; their definite relevance to problems of the day; the differences in types of research such as the laboratory study, the questionnaire study, the historical study, or the experimental study; and the essential simplicity of the research design and analysis. I would concur in these observations. These studies asked questions which have broadened the horizons of our understanding about how we learn to read, about factors which influence the reading process, and about instructional problems relevant to reading. The questions asked led to findings which have had definite instructional consequences.

It is worth noting, however, that eight of these nine research studies are essentially descriptive or status studies. That is, eight asked the question, "What is the nature of the situation?" Only one, that by Agnew, asked the question, "What would happen if I tried to control all but the one variable I wish to study?" The distinction here is in keeping with the observation that some research is "experimenting," or ascertaining facts through descriptive identification and analysis, while other research is "experimental" in the sense that certain variables are controlled while another is manipulated. The important point which I wish to emphasize in this connection is this: as descriptive studies such as these pioneering and influential ones help chart our knowledge about reading, they likewise frequently set the stage for further research, some extending and exploring sub-questions not resolved by the original research, others re-examining experimentally under more controlled conditions the original findings.

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[1] Arthur R. Jensen, "The Improvement of Educational Research," *Teachers College Record,* 64 (October, 1961), p. 21.

[2] *Ibid.*

[3] David H. Russell, "Reading Research That Makes a Difference," *Elementary English, XXXVII* (February, 1961), pp. 74-8.

Since research is always tied to particular data, it is always influenced by particular conditions. But research data may also be tied to concepts of such power and scope as to transcend the limitations of particular data. It would appear that judgments of the significance of research should embrace each of these considerations, recognizing that as conditions change, or as more powerful generalizations are developed relative to reading theory or practice, the results of previous research may bear reexamination.

Now let us examine the current research scene.

Questions Asked in Current Reading Research

One way to feel the pulse of current research, albeit an incomplete and inexact one, is to examine published research. For this purpose I shall use as a base those studies published between June, 1960 and July, 1962, a two-year span. An informal analysis of these studies shows that about 2.5 descriptive studies appeared to each experimental one.

As usual, however, this gross figure does not tell the whole story. The approximate ratios of experimental studies to descriptive ones by broad categories are as follows: in the sociology of reading, about one in four; in the psychology and physiology of reading, about one in three; and in the teaching of reading, about one in two.

I would comment on these figures in these ways. First, it seems to me that certain studies in both categories, descriptive and experimental, asked significant questions. Second, there is encouraging evidence, particularly in experimental studies, of attempts to ask more and more penetrating questions and to find more satisfactory answers. Third, I suspect that the ratios in this two-year period are minimally representative of, let us say, types of studies conducted during the last ten years, indicating that the "What is?" question is being employed considerably more frequently than the "What if?"

Be that as it may, I believe we should be concerned that research in reading will frequently be found not to have very good answers to important questions if the relevant sub-questions behind the larger questions are fully explored. For example, in a continuing team research project at the University of Wisconsin, we are studying certain perceptual sets in children's school learning tasks. We are currently investigating the extent to which variability in reading rate is present and may be developed in children in the intermediate grades. The notion that a truly effective reader should adjust his reading rate to his purpose and to the type of material he is reading is an avowed objective of most modern reading programs. This is an important objective in terms of reading efficiency and in terms of its implications for reading instruction and materials. However, available evidence suggests that this objective is not being achieved to any appreciable extent, even at higher levels. We strongly suspect that if this is the case the reasons for it lie largely in the instructional realm—lack of clear-cut recognition of the importance of adaptability of the reading act and failure to build in the student the proper psychological set and to supply him with an arsenal of flexible reading techniques.

We have hypothesized that a flexible reading set may be developed at this level, and that the skills necessary for its effective use may be taught. Our questions are straightforward: "Do flexible reading sets exist in children?" "Can a flexible reading set be taught?" But in asking such questions we have encountered enormous problems. Let me deal only with the first of these questions.

Here is a sampling of sub-questions we have had to raise and try to answer:

1. How should rate be measured—by

words? by idea units? by sentence or larger units? I assure you this question is not as naive as it sounds.

2. How should comprehension be measured—by selected items judged important by adults? by objective tests? by student self-reports?
3. How may comprehension units be equated with rate units? Should they be? Or do we measure one thing and test another?
4. How much comprehension should be required—any amount? 70 per cent? 100 per cent?
5. How is the comprehension task affected by the purpose for reading? Should we ask a standard number of questions regardless of whether the purpose is to read, for example, for main ideas or for the sequence of ideas?
6. How can we equate test selections with respect to such variables as content, with respect to style, as narrative vs. expository, or, for that matter, the curious blend of narrative-nonfiction currently so popular in children's readers; with respect to paragraph structure, as inductive vs. deductive patterns; or even with respect to reading difficulty?

These are merely some of the problems we felt must be faced if we were to control important test variables which might affect rate of reading. I could add many more. Yet as we have examined the research literature, including available tests, which is related to our problem, we have found that questions such as I have illustrated are not satisfactorily answered. We have therefore had to hammer out, slowly and laboriously, the best answers we could to the criteria implied by such questions and in turn build them into a measuring instrument. The process has taken not days, but weeks and months.

What does the latter situation suggest? If our experience is at all representative, it suggests that research leads from one question to many sub-questions. It suggests that major questions often cannot be answered until these sub-questions are identified, clarified, and controlled—until, in other words, important variables are known and dealt with. It suggests that research in depth is needed upon conceptually oriented, instructionally significant questions to permit more adequate answers to this and to many other reading problems.

Questions to be Asked in Future Reading Research

What questions will be asked in tomorrow's reading research? One can only speculate. Perhaps it is relevant first to inquire about the characteristics such questions should have if they might be expected to lead to powerful and useful generalizations. We might ask, for example: (1) Is the question an open-ended, leading one, capable of further development? (2) Does the question relate to or grow out of an identified theoretical orientation? (3) Does the question suggest a fresh perspective, either to attack a persistent problem or to explore new ground? (4) Might the question yield generalizations which would permit greater insight into reading theory or control over reading practices, or both? I suspect that if a given question possesses such characteristics it is important to seek to answer.

Purely by way of illustration, I might suggest certain areas in which fruitful questions might be formulated in future research in reading. We need to explore much more fully the affective and cognitive interactions between people and print in order to use reading materials wisely. We need to understand much more clearly the stylistic and subjective aspects of readability. Perhaps we need to make very explicit our learning assumptions with respect to such current movements as individualized reading, programed reading, and structural linguistics. We need to consider the operation and importance of learning strategies and sets in reading, not only in simpler reading processes but in the "creative" reading processes of the superior student. We need to know much more, as MacKinnon has so aptly put it, about how DO children learn to read. We likewise need to understand more clearly the genesis and possible prevention of reading disability. We need to explore different bases for making curriculum decisions about reading, and to test the effects of such decisions upon reading practices, materials, methods of evaluation, and the social and psychological context in which the pupils learn to read. Many other areas might be added.

Speaking largely from my own experience and observation as a member of a research team for several years, I see great future promise in the use of teams which, representing different disciplines and types of competence, may identify and pursue especially crucial questions. I see great promise in research efforts which link the more precise methods of laboratory experimentation with field studies in cooperation with schools and school personnel, thus getting at questions of particular relevance to instruction. I see much value in the more extended study which permits the experimenter to ask and to attempt to come to grips with important sub-questions generated out of the general question under study.

Research in reading, I am sure, will be even more productive in the future than it is today as old problems are seen anew and new questions are incisively formulated. Future research will be most productive if entered into by experimenters who, first and foremost, learn to ask the important question, the searching question, the question that makes a difference.

2. Improving Designs in Reading Research—An Eclectic Approach

HARRY C. HENDRICKSON

The quotation "Know the truth and the truth shall set you free" was used as the motto or text for a college course in abnormal psychology a few years ago. It applies equally well to the field of reading research, for the aim of all our endeavor is to come as close to the truth as possible and to use our knowledge to free ourselves of misconceptions and false approaches that we may proceed with clarity and directness in reading instruction.

That there is need for improvement in the area of research design in reading goes without saying. Many fine pieces of reading research are carried out each year by those who are skilled in research approaches, but unfortunately there are also too many examples of shoddy research resulting in unfounded and unwarranted conclusions. Such poor work represents a double loss—the time, effort, and money spent which produced nothing of value and the missing significant results which might have been produced with the same time, effort, and money.

To reduce this loss, thoughtful researchers are turning to a consideration of improved research design as an important means of insuring better research studies and reliable gathering and interpretation of data.

Criteria for Formulation of Theories and Hypotheses

One of the most important steps in improving research design in reading is the formulating of satisfactory theory before embarking on the detailed work of a study. The goal is not fancy words and elegant expression but something deeper and more fundamental. The important factor is clear delineation of theory and hypotheses with exact limitation of their boundaries to enclose an area which can be adequately investigated within the scope of the proposed study to be made.

Willower (5) has set forth six criteria for judging the adequacy of a theory. They are the following: testability, consistency, scope, predictive power, fruitfulness, and parsimony. Testability is explained as the extent to which a theory leads to deductions which can be credited or discredited by an empirical test. Consistency is interpreted as freedom of the theory from internal contradiction. Scope indicates that a theory should account for a relatively wide range of data. The criterion of predictive power states that a theory should provide a basis for successful prediction. Fruitfulness is defined as the extent to which a theory generates a variety of new hypotheses. Parsimony is used to mean that, other things being equal, a simpler theory is preferable to a more complicated one. The reason for this is obvious.

Willower concludes that of these six criteria, predictive power is perhaps the acid test of a theory. This conclusion seems to be a logical one.

Here, then, is a good guide for examining and rating hypotheses before fixing upon their final form. As the first step in insuring good research design, the hypotheses should be carefully studied in light of these criteria. If necessary, it should be revised and stated in such a way as to fulfill as many of the criteria as possible, particularly the one concerned with predictive power.

Developing the Research Design

When the hypothesis has been satisfactorily stated, the next logical step is to consider the form and details of the research design. Brownell (1) made a powerful plea for simplicity of design when he said that too many researchers are so preoccupied with complex, complicated research designs that they overlook the virtues of simple, uncomplicated designs.

We should always ask ourselves the question, "What is the most effective design for conducting the research?" By effective design we mean that which will produce accurate, complete, and reliable results with a minimum of time, effort, and expense. If a simpler design will accomplish this as well as a complicated design would, the researcher should select and utilize the simpler design.

Too often, according to Brownell, we hide behind complex procedures and develop a false sense of security, thinking that this complexity will compensate for weaknesses of technique and data. We should not condemn complex designs when they are necessary, but we should always be aiming for designs that produce research in depth as contrasted with research in which "shallowness is hidden beneath a surface of technical excellence." A virtue of simple research designs is that we can more easily concentrate on the problem, the necessary data, and the procedures for obtaining them.

A common problem for bureaus of research, particularly those associated with public school systems, is that of being called upon to assist a division, department, committee, or individual with a research problem. This is a legitimate function of a bureau of research. However, all too often the Bureau is consulted too late—not at the beginning so that assistance could have been given in the research design, but toward the middle or end of the study when the investigation has bogged down. In many instances, Bureau personnel are faced with giving the investigators Palmer Johnson's famous advice about the data collected—"Cremate them."

Professional research workers should encourage teachers and others without technical training and experience in research practices to consult with them at the outset in designing a research study. This should result in more research that is worthwhile, with less disappointment and scrapping of results. Research departments and bureaus have an obligation to make beginners in research feel welcome to discuss their anticipated studies without being made to feel inferior and inadequate because of their lack of sophistication in research techniques and statistics. Realization of one's own limitations and the desire to seek assistance are the first steps toward self-improvement.

Organizing the Details of the Study

After the hypothesis has been determined and the basic form of the design established, it is then time to examine procedures concerning the details of the design. Attention to these details can spell the difference between good and poor research. If we are investigating a problem such as the difference in reading achievement under an individualized reading approach versus that of the use of a basal text, Clymer (2) has some excellent suggestions regarding details. These include precise definitions of experimental and control methods, measurement procedures, timing of achievement evaluation, determination of student characteristics to be studied, and provision for follow-up so that it can be stated to what degree the comparison of achievement at the end of the experimental period will hold at some future date.

Clymer (2) offers cautions regarding selection of teachers by reminding us that those who volunteer to experiment with new methods are likely to be those who are alert, superior teachers already. If there are several volunteers, they should be divided equally between experimental and control classes in order to avoid an imbalance of ability and enthusiasm in favor of the experimental group.

He further warns that in many comparative studies of reading methods, a common error in the design is that of providing an intensive in-service training program for the teachers using the experimental approach while ignoring the teachers using the control method.

Gates (4) mentions that he has often found clear evidence that the teacher's skill was the decisive factor. "The crucial influence, however, seemed often to be other characteristics of the teacher such as the degree of her enthusiasm or her determination to make the program succeed." This is a point which must be carefully considered in research design.

Gates appears, at least to some extent, to share Brownell's approval of a simple research design, for he further states that "complex programs usually leave uncontrolled so many variables that one often cannot tell which one produced the results shown in a comparison of two or more of them. The experimental group nearly always wins, often as a result of no merit of its own." He concludes that the tendency of the new experimental procedure to win out suggests that in research studies we must be concerned with maintaining teacher and student interest in the control method as well as in the experimental method in order to produce reliable results.

To avoid the contaminating factors previously mentioned, the researcher might well consider the six areas of importance suggested by Dolch (3): (1) Compare equal teachers working equally hard. (2) Compare pupils of equal natural ability and equal home influence. (3) Compare equal school time and emphasis. (4) Watch carefully the size of class. (5) Beware of misleading averages, and (6) Watch for unmeasured results. Dolch warns us emphatically of the traps for the unwary when he states, "Thus, many school experiments are worse than wasted time; they may actually lead to wrong decisions and practices. This is especially true in the field of reading."

The use of longitudinal research in reading and of studies which are replicated in representative communities typical of various sections of the country should be considered in the broad pattern of research design. Many times we read of studies which claim superiority for Approach X and later learn that Approach X is good only at a certain grade level or with a particular type of class. Some variable which had not been measured correctly or controlled adequately had possibly contaminated the results obtained with a single class. By measuring all the variables likely to affect results and by following up with similar studies on a longitudinal basis, many of these factors can be controlled.

To conduct such widespread research is time-consuming and costly, but it is encouraging to read of communities and school systems that are conducting joint experimentation on the same problem in order to provide the broader approach that is needed. This approach will require additional financial resources. Another step then, in the improvement of research design, will be to convince school administrators, school boards, colleges, government agencies, and foundations of the necessity for supporting long-term reading research as well as mathematical, scientific, and space research. Good reading ability is basic to almost all learning. What better use can be made of money for research purposes!

Measuring Devices and Statistics

When we measure the weight of children in a class, grade, or school, we have a relatively easy situation. The measuring instruments (scales) have been standardized. The units of weight (ounces and pounds) are commonly understood, standardized units. We know that the scales have validity and reliability, that we can expect the same results in the same units of weight time after time.

Even with this high degree of exactness, we must guard against a few factors —that the scales are not mechanically defective, that the weight of clothing is considered, that the same set of scales will give varying results at different geographical locations on the earth.

When we come to measure reading ability and growth in reading achievement through different methods of instruction, what an array of problems beset us. No longer are we dealing with measuring instruments which are definite and exact. Just how good are the best of our reading tests—especially for the culturally disadvantaged child, the rural child, the child of a minority group, the emotionally disturbed child, the child with a visual or hearing handicap?

With what degree of precision are we able to measure reading? How fine are the gradations along the scale? Do we really measure ounces and pounds of reading or only tons? With what reliability and validity do we obtain our results?

And the statistical processes which we must utilize in order to analyze data—how good are they? We know that they do not isolate small forces well. Statistical methods now available are often unequal to the demands of revealing all the facts that are probably present. In short, we know that statistics cannot give us all the help we need.

Too often we mistakenly hide behind them, expecting the statistics to do our thinking for us. We must always remember that the statistics we obtain and the statistical processes themselves are merely tools for thinking—that it is the duty of investigators to utilize these tools as aids to thought and not as ends in themselves. Nothing will replace the keen mind of a good researcher who has the ability to understand the significance of his data, to see relationships, and to draw logical conclusions and inferences, always watchful that he is not deluded by happenstance factors and remembering that the obvious is not always the sole cause. Good research design should include a good researcher—competent to plan and deal with his data and statistics in a satisfactory fashion.

The new field of electronic data processing will be a boon in the development of statistical techniques. Where we have had to rely on samples and nonparametric techniques in obtaining and analyzing our data, we may in the future be able to secure measures of complete statistical populations such as all the fifth-graders in a city, a state, and ultimately the whole country. The use of electronic computers may be developed to the level where previously hidden facts are revealed through revised statistical methods. Research designs in the future must include, as far as possible, the latest improvements in accuracy, speed, and comprehensiveness of the statistical process as a result of developments in electronic data computing.

Does it seem discouraging that at this point we do not have all the techniques and measuring precision that we need? Should we hold off on research until we have access to a 1401 computer and until statistical processes have been refined? Of course not! We know that probably we shall never have ideal conditions. We shall never be able to control absolutely all the factors of teacher and student variation. We shall never have Method X differentiated exactly from Method Y. In replications of a study, we shall probably not have Method X or Method Y presented exactly as they were the first time.

We do what we can. We make the best of the situation as it is. We guard against all the contaminating factors that we possibly can. We choose the most reliable of our measuring devices; we choose our samples as wisely and objectively as we can. Then we conduct our study and interpret our results as intelligently as possible, realizing that we cannot arrive at ultimate truth but that each bit of research brings us a little closer to that goal.

Summary

The design of a research problem can spell the difference between reliable, significant research and useless puttering in the name of research. Some suggestions for improving research design in reading include the following:

1. If unsophisticated in research procedure, consult research experts before beginning a study.
2. Establish a well delineated hypothesis.
3. Develop a simple rather than a complicated design whenever possible.
4. Organize the details of the study

thoroughly to provide adequate controls and avoid contamination of results.

5. Consider the possibilities of long-term, wide-scale studies in various sections of the country and plan for follow-up replications.
6. Know the uses and limitations of statistics as a tool; be alert to expected improvements resulting from electronic data processing.
7. Know the limitations of reading tests.
8. Make the best of the current situation. Do not wait for ideal conditions.
9. Encourage school systems, colleges, government agencies, and foundations to give financial support for reading research.

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3. Cloze as a Measure of Readability

JOHN BORMUTH

Modern teaching techniques demand that research improve the accuracy of readability formulas. Teachers are cautioned against harming a child's growth in reading skills by having him read continuously from materials that are too difficult or too easy. On the other hand they are urged to have children read widely from trade books and other non-textbook materials. Since the difficulty levels of such materials are often only vaguely known, these mandates place the teacher in a dilemma. Chall[1] states that the readability formulas, at their present stage of development, do not have the accuracy required by the teacher's needs.

Researchers in this area have been hindered by the fact that they were forced to rely upon traditional testing procedures in order to determine the comprehension difficulties of passages. Lorge[2] criticized the use of conventional tests in readability research by pointing out that the tests do not necessarily reflect the difficulties of the passages over which they are written. The tests' difficulties may be due to the language used in writing the questions, to the alternative answers given, and to the kinds of questions asked. These sources of difficulty are irrelevant to, but presently inseparable from, the source that the researcher is attempting to measure.

Purpose

The purpose of this study was to see if cloze tests can be used as measures of the comprehension difficulties of the passages from which they are made. A cloze test is a completion type of test that is made by deleting every fifth word in a passage. This manner of constructing cloze tests exempts them from the criticisms leveled at the conventional tests.

Before they may be used in practice to measure the comprehension difficulties of passages, it must be shown that they measure comprehension ability, that the difficulties of the tests correspond to the difficulties of the passages from which they are made, and that each may be used with broad ranges of groups and materials. The hypotheses tested were that (a) Scores on cloze tests correlate with scores on multiple-choice tests written over the same passages, and also with scores on tests each of which contains a different kind of comprehension item. (b) There is a correlation between the two sets of difficulty ranks that are obtained from scores on multiple-choice and cloze tests that are made over the same set of passages. (c) There is a correlation between the cloze test difficulty rankings of a set of passages when the tests are given to groups which differ in Dale-Chall grade placement levels. And items in cloze tests are distributed over the full range of difficulties.

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[1] Jeanne S. Chall. *Readability: An Appraisal of Research and Application*. Bureau of Educational Research Monographs, No. 34. Columbus: Ohio State University, 1958, p. 164.

[2] Irving Lorge, "Readability Formulae—An Evaluation," *Elementary English*, 36 (February, 1949), pp. 86-95.

Related Research

There is some evidence that cloze tests measure comprehension ability. Taylor[3] found a correlation of .76 between one cloze test and a multiple-choice test that was written over the same passage. Fletcher[4] and Rankin[5] have each found significant correlations between scores on cloze tests and on assortments of standardized reading tests.

A small amount of evidence indicates that the difficulty of a cloze test corresponds to the difficulty of the passage from which it is made. Sukeyori[6] made cloze tests over eight passages which were written in the Japanese language and gave them to native speakers of Japanese. A *rho* correlation of .83 was observed between the difficulty ranks obtained from the cloze tests and the combined difficulty ratings by three judges. Taylor[7] found that a set of cloze test difficulty rankings had a reliability of .98.

Item analysis of cloze tests seems to show that almost any cloze test can be used with subjects who differ greatly in ability. Fletcher[8] and Taylor[9] have each found that items in the cloze tests they studied varied over the full range of difficulty.

Procedure

A set of nine short passages was written so that there were three in each of the subject matter categories of literature, social studies, and science. Within each category passages were written at the 4.5, 5.5, and 6.5 readability levels. Specifications for readability levels were computed using the Dale-Chall formula.[10]

A 31-item, multiple-choice comprehension test was written over each passage. All contained identical numbers of items which were written to measure comprehension of vocabulary (12), facts (7), sequences (2), causal relationships (4), the main idea (1), inferences (4), and the author's purpose (1). An individual's comprehension of a passage was found by counting his correct answers on the 31 items over that passage. His ability to answer a type of item was found by counting his correct responses on all of the items of that type in all nine tests. Care was taken in writing the items to reduce the sources of error pointed out by Lorge.

A cloze test was made over each passage by deleting every fifth word in the passage until 50 items had been obtained. No punctuation was deleted unless it was an apostrophe in a contraction, a comma in a number, or a hyphen in a hyphenated word. Both portions of hyphenated words and contractions were deleted.

The tests were administered to three groups of 50 children each. One group came from each of the grades 4, 5, and 6. Cloze tests were administered before the children had had any opportunity to read the passages from which they were made. Multiple-choice tests were administered in such a way that the child first read the passage and then immediately took the test over it, without referring back to the passage.

Results

The correlation between the cloze and multiple-choice tests over each passage difference between these two sets of reliabilities was significant at the .05 level. The correlation of .92 between cloze and multiple-choice test difficulty ranks was as high as the reliability of the multiple-choice test difficulty ranks would permit.

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[3] Wilson L. Taylor, "Cloze Readability Scores as Indices of Individual Differences in Comprehension and Aptitude," *Journal of Applied Psychology* (February, 1957), pp. 19-26.

[4] Junior E. Fletcher, *A Study of the Relationships Between Ability to Use Context as an Aid in Reading and Other Verbal Abilities*. Doctor's Thesis, University of Washington, Seattle, 1955, 95 pp., typed.

[5] Earl J. Rankin, *An Evaluation of the Cloze Procedure as a Technique for Measuring Reading Comprehension*, Doctor's Thesis, University of Michigan, Ann Arbor, 1957, 221 pp., typed.

[6] Shiba Sukeyori, "A Study of Readability Measurement—Application of Cloze Procedure to Japanese Language." (English Abstract), *Japanese Journal of Psychology*, 28 (August, 1957), p. 135.

[7] Wilson L. Taylor, "Cloze Procedure: A New Tool for Measuring Readability," *Journalism Quarterly*, 30 (Fall, 1953), pp. 415-33.

[8] Junior E. Fletcher, *op. cit.*, p. 95.

[9] Wilson L. Taylor, *Application of "Cloze" and Entropy Measures to the Study of Contextual Constraint in Samples of Continuous Prose*. Doctor's Thesis, University of Illinois, Urbana, 1954, 120 pp., typed.

[10] Edgar Dale and Jeanne S. Chall, "A Formula for Predicting Readablity," *Educational Research Bulletin*, 27 (January 21, 1948), pp. 11-20.

The third hypothesis was tested in two ways. First the *rho* correlations between the cloze test difficulty ranks by each of the three grade level groups was found. These were reported above as estimates of the reliability of the cloze test difficulty ranks. They were .99, .98, and .98.

The second test of this hypothesis was performed by computing the proportion of subjects in the total group who passed each item. These were found to be evenly distributed over the entire range of difficulty from approximately .00 to 1.00 on all of the tests.

Discussion

With respect to the question of whether cloze tests measure comprehension ability, the fact that nine cloze tests and a variety of multiple-choice tests were used in this study makes these results fairly generalizable. Not only were these correlations high, but they showed much uniformity among the cloze tests. This was interpreted as indicating that cloze tests are both uniform and valid measures of comprehension ability.

From the size of the correlation between the cloze test and multiple-choice test difficulty ranks of the passages it was evident that cloze tests were valid measures of the readabilities of these passages. The higher reliability of the cloze test ranks suggests that they are superior to multiple-choice tests when used for this purpose.

The broad distributions of item difficulties on the cloze tests and the uniformity in the ways the different groups ranked the passages indicated that almost any given cloze test is appropriate for use with individuals and groups which vary widely in comprehension ability.

Conclusions

It was concluded that the cloze tests used in this study were valid, reliable, and flexible measures of the comprehension difficulties of the passages from which they were made. This was based on the following specific conclusions:

1. Cloze tests are valid and uniform measures of reading comprehension ability.
2. The cloze tests were valid and highly reliable predictors of the comprehension difficulties of the passages.
3. Cloze tests are appropriate for use with individuals and groups which vary widely in comprehension ability.

4. Effects of Word Form on Retention

ROBERT BYRNE

For many years the textbooks on the teaching of reading have emphasized the importance of configuration for the recognition and retention of new words. Yet many elementary teachers, especially those who teach intermediate grades, use cursive writing for various learning activities, and manuscript writing for others. Completion sentences, for example, are commonly seen on the chalkboard in cursive writing. Word cards are often written in manuscript for use in small groups when the teacher could have available a primary typewriter to use for making the word cards.

Some teachers write rather than type their tests and exercises for duplication. Many types of material are presented to children in different subjects by means other than typing and by either lower or upper case letters. Teachers of remedial reading frequently use word cards for word study, word drill, or to check on a child's knowledge of sight vocabulary. The word cards may be typed or written, depending upon the teacher's preference.

According to Gray[1], one of the most important ways to recognize and to retain words is by configuration. He states:

> "Retention of words requires both careful scrutiny of their forms and visual memory. In identifying words especially in

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[1] William S. Gray, *On Their Own in Reading.* Chicago: Scott, Foresman and Company, 1948, p. 46.

was computed utilizing the scores of all 150 subjects. Table 1 shows each correlation and the reliability of each test.

Table I

Correlations Between the Cloze and Multiple Choice Test (M-C) Over Each Passage and the Reliability of Each Test (N=150)

	Passage from which the tests were made:								
	1	2	3	4	5	6	7	8	9
Cloze vs. M-C	82	84	83	80	73	79	75	75	75
Cloze reliability	86	87	88	87	84	86	86	85	84
M-C reliability	87	85	88	86	86	85	82	85	85

Reliabilities were computed by the method known as rational equivalence or internal consistency. All correlations were significant at the .01 level, but they fell short of the sizes permitted by the reliabilities of the tests. Visual inspection of the score distributions showed that the lowest correlations occurred where the multiple-choice tests were too easy to discriminate throughout the full range of abilities in the group. Cloze test scores showed no such tendency to be scewed.

This effect was eliminated by first, separating the subjects into three groups by their grade levels. Second, each individual's cloze test scores were added together and the same operation was performed on his multiple-choice test scores. Table II shows the correlations and the reliabilities of the tests for each group and for the total group. When these correlations were corrected for the reliability of the tests, all were approximately 1.00.

Table II

Reliabilities and Correlations Between Total Scores on Cloze and Multiple-Choice Tests

	Reliabilities		
Group	Cloze test	Multiple-choice test	r
Grade 4	.94	.94	.95
Grade 5	.91	.92	.94
Grade 6	.84	.81	.83
Total	.93	.91	.93

Correlations were computed between scores on each cloze test and on each of the multiple-choice tests containing a single type of item. Table III shows these correlations along with the reliability of each test. All were significant at the .01 level. The distributions of scores on each of the multiple-choice tests indicated that all but the vocabulary test were too easy. When this fact was taken into consideration, it appeared that the correlations were about as high as the reliabilities of the tests would permit.

Table III

Correlations Between Scores on Cloze Tests and on Tests of Different Types of Comprehension and the Reliability of Each Test (N=150)

	Type of multiple-choice test:							
Cloze Test	Vocabulary	Facts	Sequences	Relationships	Main Idea	Inferences	Purpose	Reliability
1	89	83	68	83	38	84	73	86
2	83	77	70	79	46	80	70	87
3	85	82	67	80	41	81	71	88
4	87	83	65	82	43	84	70	87
5	82	78	64	78	36	81	70	84
6	88	82	63	81	41	82	69	86
7	84	77	62	75	38	78	68	86
8	82	75	64	80	39	79	70	85
9	83	81	63	76	35	78	70	84
Reliability	93	88	71	87	43	88	76	

In order to test the second hypothesis each passage was assigned two ranks. One was obtained from the relative size of the mean score of the group on the cloze test over it. The second ranking was obtained in the same way but used the mean on the multiple-choice test. The *rho* correlation between the two sets of ranks was .92.

To provide a basis for evaluating the size of this correlation, the reliability of each set of ranks was estimated. The two sets of ranks were found for each grade level group. The *rho* correlation between the cloze test ranks for the groups in grades 6 and 5 was .99, in grades 6 and 4 was .98, and in grades 5 and 4 was .98. The reliabilities of the multiple-choice test ranks were found to be .85, .90, and .87 for the respective sets of ranks. The

> the beginning stages of reading, the child relies rather heavily on word-form clues such as the length of the word (am, something), the general appearance of the word (there, see, have, little), and any special distinguishing characteristics a word may have. A first grader, for example, may notice such words like grandfather and valentine because they are long. A fourth grader will find general form or contour especially helpful in discriminating between words that may be used more or less synonymously, such as *though* and *yet*."

Several other reading authorities have emphasized the importance of a child's being taught manuscript writing instead of cursive in first grade if maximum growth in reading is to be achieved (*see References, p. 136*). The value of the use of the typewriter has also been stressed by a few authors. The purpose of this paper is not to dispute the logic and research contributed by these writers but to establish a reasonable doubt in the mind of the reader concerning the importance of configuration in the learning and recalling of vocabulary words.

Investigation has been and is being conducted at the present time to determine whether or not the initial presentation of an unknown word by different types of visual forms has any effect upon a child's ability to recall the word. The different visual forms were words which had been typed in lower-case letters, typed in upper-case letters, written in cursive writing, or written in manuscript writing.

The first study, involving 131 children of grades 3-6, was conducted by individually presenting three unknown words of each type of the four visual forms to a subject on three consecutive days. The subject was asked to read orally a paragraph containing the twelve unknown words. If he missed one of the presented words while he was reading a paragraph containing the words, an examiner would record the error. For an estimate of his delayed recall the subject also read a paragraph containing the 12 unknown words that had been presented on the previous day.

To estimate whether or not the differential effectiveness of the four types of visual forms were constant for subjects of various mental age and reading levels, reading achievement and intelligence test scores were utilized in grouping the subjects according to one of the four reading level-mental age catetgories, before the analysis of data.

Findings

The summary of findings for this survey indicated that regardless of the subjects' mental ages, there were no signifi-

Table I
Number of Subjects and Ranges of Scores for Each Reading Level-Mental Age Category

Category	Reading level range	Mental age range	Number of subjects
High R.L. High M.A.	5.1 to 10.6	10-6 to 16-1	45
High R.L. Low M.A.	5.1 to 8.1	8-5 to 10-5	25
Low R.L. High M.A.	3.3 to 5.1	10-6 to 12-8	24
Low R.L. Low M.A.	1.9 to 5.0	7-6 to 10-6	37

Table II
Categories and Mean Variables

Category	C.A.	M.A.	I.Q.	R.L.
High R.L.-High M.A.	11-2	11-10	108.10	6.62
High R.L.-Low M.A.	9-6	9-5	100.95	5.25
Low R.L.-High M.A.	10-7	11-3	105.50	4.46
Low R.L.-Low M.A.	10-2	9-5	93.35	4.03
Total Mean	10-8	10-5	102.23	5.21

Table III
Mean Number of Words Missed

Categories	Manuscript Writing	Lower Case Typed	Cursive Writing	Upper Case Typed	Total Mean
High R.L.	*2.45	3.20	2.40	2.50	2.64
High M.A.	†2.20	2.70	2.35	1.90	2.29
High R.L.	3.90	3.85	3.75	3.00	3.62
Low M.A.	3.20	3.20	2.65	2.60	2.90
Low R.L.	4.75	4.90	4.40	4.85	4.73
High M.A.	4.10	4.90	4.65	5.35	4.75
Low R.L.	6.00	5.90	5.75	5.85	5.88
Low M.A.	5.15	5.75	5.65	5.65	5.58

*Immediate Recall
†Delayed Recall

cant differences during immediate or delayed recall in the number of words missed that had been presented by the various types of visual forms. Also the subjects of the high reading level categories did not indicate any significant differences in their immediate or delayed recall scores for each type.

Although there was no significant difference for the modes of presentation of the lower readers during immediate recall, it should be noted that the children of the lower reading levels missed more total words that had been presented by an upper case form and the children of the higher reading levels missed fewer total words that had been presented by an upper case form.

Analysis of the data on the lower readers for delayed recall seems somewhat contradictory since each type of visual form proved to be the most difficult to learn for the different word lists. These conflicting results may be explained as being a difference between word lists. One list may have been more difficult to learn by one type of visual form than by another type.

Second Study

A second study was conducted to investigate the importance of configuration in first and second grade. This study, however, should be considered as being more exploratory in nature rather than comprehensive in its application. Fifty first-grade and 48 second-grade children were taught a total of 16 words in two consecutive days. These words, eight typed in upper case and eight typed in lower case, were presented to the children by use of an overhead projector. A standardized procedure and a picture representing the word was used in its presentation. The children's abilities to recall the words were estimated by a group test. Neither the children with the higher reading levels (3.0-3.7) nor the children with the lower reading levels (1.3-2.9) indicated any significant difference in their retention of the two types of visual forms.

Present and future research concerning the effects of word form on the retention of words includes a greater number of subjects, varying lengths of time and number of words, different methods of presentation and testing for recall, and investigation of the relationship between the total reading program and the different word forms. Further studies must be conducted under several different conditions before the effects of word forms can be properly analyzed. It was the purpose of this paper to stimulate research and to establish a reasonable doubt in the mind of the reader concerning the importance of configuration in the learning and recalling of words.

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5. Reactions of Selected Teachers and Pupils to Three Types of Specialized Reading Equipment[1]

JOSEPH MILLMAN

During the school year 1958-59 the Bureau of Audio-Visual Instruction equipped 17 schools at the elementary, junior high, and high school levels with specialized reading equipment. This included tachistoscopic equipment for the elementary level, pacers for the junior high school level and accelerators for the high school level. The equipment was to be utilized in the existing reading programs in these schools on an experimental basis.

In September, 1960 the Bureau of Audio-Visual Instruction requested the Bureau of Educational Research to help in the evaluation of the equipment. It was decided, as a first step, to survey teacher and pupil opinion in the schools using the equipment. The information gathered through such a study was to provide a partial answer to the immediate question of appraisal and to provide guide lines for the design of an experimental control study.

In this survey, the plan for collecting evidence envisaged the following approaches:

1. A review of relevant studies on the three types of reading equipment evaluated in this report.
2. An evaluation of the effectiveness of the equipment through teacher and pupil appraisal in questionnaire form.

Review of Literature

A review of the available literature revealed:

1. That the majority of the research studies were somewhat limited.
2. That the more reliable research had been conducted with college students or with adults.

The one research of value to us was reported by Bottomly.[2] The experiment involved 460 pupils of the fifth and eighth grades from two schools, with an experimental and control group in each school. The researchers concluded that the reading pacers used had demonstrated real promise for inclusion in the regular developmental reading program.

Teacher and Pupil Appraisal in Questionnaire Form

1. Criteria for selection of pupils
    1.1. How were the pupils selected for special help in reading?
2. Use of equipment and materials
    2.1. Approximately how many times per week were the machines used with each reading group.
    2.2. Check the average length of time each machine was used during a class period.
    2.3. Was the machine used in the same way for all the pupils in a given class?
    2.4. Are the materials used generally suitable with respect to content, reading levels, ability and age of pupils?
3. Other considerations
    3.1. When was pupil interest in lessons greatest, lowest?
    3.2. Does the use of the reading machines require unique or special teacher planning and preparation, compared with commonly employed techniques and procedures of teaching reading?
    3.3. Who were the pupils who seemed to derive the greatest or least benefits?
    3.4. Can the objectives of your special reading program, in terms of pupil needs, be achieved as well by the usual techniques of teaching reading as with the machine-type techniques?
    3.5. Your opinion is requested for the listed objectives or areas in which reading machines

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[1] Complete report on file in Bureau of Educational Research, 110 Livingston Street, Brooklyn, N. Y.

[2] Bottomly, Forbes, "An Experiment with the Controlled Reader," *Journal of Educational Research*, 54 (March 1961), pp. 265-269.

> are believed to have influence: organization of thought, acuity of perception, comprehension, aggressive seeing habits, fixation span, reduction of regressions, motivation and rate of reading.

The pupil questionnaire covered the following:

1. Why do you think you were chosen to attend a special class in reading?
2. Do you feel you have improved since attending the special reading class?
3. What have you enjoyed most or least in the reading program?
4. Check the number of books or stories you have read, outside of class, since the beginning of this term.
5. Has the use of the machine helped or interfered with your reading?
6. Would you like to continue to use the reading machines next year?

Summary of Findings

On the question of criteria for selecting pupils for this special type of instruction, the main consideration at the elementary and junior high school levels was low reading achievement. On the senior high school level concern was primarily to develop increased speed and comprehension with students of high achievement.

There was a wide range of responses in the pattern of fluctuation of pupil interest in the equipment. The diversity of responses may be due, in part, to the types of material accompanying the different machines. Interesting material drew favorable pupil reaction, while detailed material or material of a scientific nature was generally rejected.

The ten teachers on the elementary and junior high levels who returned their questionnaires felt that the least retarded pupils derived the greatest benefit from the instructional programs the equipment provided.

While there was no clear trend of opinion among the high school teachers it was generally agreed that the equipment proved most beneficial to the superior readers. However, the teachers who taught the less able readers at this level felt that the equipment was most beneficial with this type of pupil. One of the teachers with an honors class felt that the equipment was best for the relatively slower readers. The general consensus was that the equipment was useful for most classes, despite the level of ability on which they could function in reading skills.

No clear-cut determination could be made on the elementary level concerning the comparability and effectiveness of the machine-type equipment in relation to other more commonly employed reading techniques since the responses of the three teachers differed. The junior high school teachers expressed unanimity in judging machine-type techniques to be superior to the more commonly employed reading techniques. The majority of the senior high school teachers felt that there was little difference between the two techniques in effectiveness.

Finally, the 20 teachers on all levels responded favorably to the questions concerning materials that accompanied the specialized reading equipment. The materials were felt to be adequate in terms of general content, interest, age level of pupils, and levels of reading ability.

Pupils on the elementary, junior high, and high school levels generally agreed that improvement in reading had occurred while attending special reading classes employing reading machine equipment.

Pupils' reports of number of books read outside of school during the period they received special reading help appeared better than average.

In answer to the question as to whether or not pupils would like to continue to use the reading equipment most of them indicated that they would.

The percentages of pupils on each of the three educational levels who answered that they would not have made as much progress in reading if the machines were not used were somewhat less than for the other items discussed. Nevertheless, generally a majority of the pupils responded favorably to this question.

The different equipment used at the different levels seemed to have been effective, in the opinion of the students responding to the questionnaires, in developing the specific skills they were asked to evaluate.

There was generally a high degree of consistency of responses by the students at all levels in their enjoyment of the specialized reading equipment and the accompanying materials. A number of limitations, however, were cited. These included the stipulation that the equipment must be in good working condition, that the classroom set-up must be favorable, and that materials should be screened for pupil interest and ability.

The students generally endorsed the reading programs which included the use of the specialized reading equipment.

These conclusions stem from my position as project coordinator between 1958-1963.

1. A need for an experimental-control study of specialized reading equipment in order to,
    1.1. Establish the specific contribution made by equipment to the reading process.
    1.2. Compare the effectiveness of the equipment with standard teaching techniques.
    1.3. Guide teachers by establishing specific utilization practices.
2. Developing standards and guide lines for producers of equipment and materials to meet.
3. The establishment of a permanent group, by the International Reading Association, in order to investigate thoroughly claims made by developers of new rapid reading programs. This group could then act as a resource group for schools.

H. Clinical Aspects of Reading

1. Are Emotional Problems a Block to Reading Achievement?

FLORENCE G. ROSWELL

In conferring with teachers and psychologists one hears over and over again, [redacted]

[redacted]

Agrees with next article

Complex Nature of Emotional Disturbance

First, one must reflect on the meaning of the term emotional disturbance. Some of us are all too prone to use it in an undifferentiated way. However, it is important to recognize that emotional disturbance differs in degree and in complexity. To make a searching analysis of the nature of the problem requires diagnosis by a psychologist or psychiatrist. Thus, merely saying that a child has an emotional block towards reading does not describe anything except that somewhere along the line he has been given up as hopeless regarding his ability to learn to read. Furthermore, the impact of personality problems on ability to learn varies from child to child. In many cases, as we all know, reading proficiency is adversely affected. However, there are countless other cases where children who can read very well do a prolific amount of reading to escape from the problems of living. Another aspect frequently overlooked is that emotional disturbance need not necessarily be the *cause* of reading disability. It may very well be the *result* of the constant frustration, humiliation and anxiety a child feels as the result of failure in school. Since success in school is crucial to a child's sense of well-being, failure can shatter his self-esteem and engender such deep feelings of unworthiness that the effect on the child's functioning can become all-pervasive. In such cases, the emotional problem cannot be alleviated until the child's functioning in school improves. Moreover, emotional disturbance may be present but not necessarily causal in the development of the reading disability. Finally, we have increasing evidence that emotional disturbance is only one of many major reasons for lack of success in reading.

Generally same as next article.

Children with Emotional Problems Can Learn to Read

Despite all the ramifications of the problem, we believe that, in general, even if a child's ability to learn is impaired to some extent because of emotional disturbance, all avenues to learning are not closed.

This statement is based on experience with large numbers of cases seen at our clinic, where comprehensive diagnostic examinations of these children revealed deep-seated problems. Most of the children were in dire need of psychotherapy, which for one reason or another was not obtainable. Yet, they were able to learn to read. In fact, those of us who have worked with quite disturbed children have even seen positive changes in their personalities and general adjustment as failure was lessened and as school became more bearable.

I do not mean to imply that teaching such children is easy. It is very difficult. Yet ways can and must be found to reach them.

Needless to say, when a teacher is faced with a difficult problem, she uses whatever resources are available for securing psychological diagnosis and treatment where indicated or specialized remedial instruction, where available. Unfortunately, facilities for such help are so limited or so costly that usually the problem devolves completely upon the classroom teacher for solution.

Good.

Effective Teaching Is Therapeutic

First, it is important to restore teachers' faith in their own ability to teach children who show evidence of emotional difficulties. Actually, good teachers have always been able to help their pupils overcome problems and have been a source of stimulation and inspiration to them. This is because good teaching incorporates many important psychotherapeutic principles.

A constructive relationship with an understanding teacher can be an extremely meaningful experience to a child who has failed. This implies that the teacher accepts the child as a worthwhile human being worthy of respect despite his failure in reading. She is uncritical of his performance, recognizes that he is bound to make mistakes and thus makes no negative comments. This immediately lessens anxiety and frees the child to use his capacities productively. She finds the level at which he can succeed, tries to ascertain whatever strengths he has and builds from there on. She communicates to the child that he is capable of learning. This may be accomplished through concrete illustrations of his progress and by her genuine faith in his ability to keep growing. She is not so permissive that the child is unsure of what is expected of him. Rather, she has a structured program based on his needs which she paces according to the child's ability to grasp instruction. She makes every attempt to find suitable materials that are mature in format which especially appeal to the child so that he feels something new and different is being done to help him.

Teaching an Emotionally Disturbed Child

As an illustration let us consider Brett who was 11 years old in fifth grade, reading at second-grade level before any of his teachers tried to help him directly with reading. They were all aware of his extremely distressing and rejecting home environment and felt sorry for him. His former teacher told the school psychologist, "Reading, that's the least of his problems! How can anyone expect him to learn with all he has to contend with!" In so doing she simply had not thought through the negative effect on this boy of her sympathetic but unconstructive approach. Thus, Brett was neglected by well-meaning teachers until his fifth-grade teacher recognized that something had to be done to help him. She requested guidance from the school psychologist and reading consultant.

The psychologist described Brett as a reticent, somewhat distant boy, who felt lonely, isolated and trapped. She pointed out that environmental circumstances were such that no major changes could be effected in it. Thus the school was his only refuge.

With help from the reading specialist,

Brett's teacher undertook to work with him individually at regularly scheduled sessions during the week. After some informal testing she interpreted to him what his specific needs were and outlined the various procedures she planned to use to help him cope with his reading difficulties. She also showed him reading materials which might appeal to him, which were mature in format, but at a suitable readability level. Thus, instead of his problem being something intangible, she concretized it for him. This made it appear more manageable to him so that he was able to develop a glimmer of hope. As he became aware of his teacher's sincere interest in him, his sense of isolation diminished. At least there was one person in his life who cared enough to try to help him. The fact that somebody believed in his ability to succeed was positive motivation. After several months of remedial help Brett reached the point where he could do some independent assignments which enabled him to contribute to class discussions. Gradually, he became more attentive, alert and responsive regarding school work.

Was Brett emotionally disturbed? Certainly. But in his case little could be done to alleviate his problems. However, by giving him the supportive help he needed and making it possible for him to achieve in school, Brett's teacher paved the way for helping him become a more adequate individual.

Maturational Lag And Emotional Disturbance

Carl's emotional problem was of a different nature. He was eight years and six months, and in third grade when he was referred for psychological examination by his school. His teachers noted that despite the fact that they used a systematic phonic approach with much review and repetition, Carl had great difficulty learning to read. By third grade, he could handle only a first-grade reader.

The psychologist found that there was a history of delayed speech with infantile speech patterns still apparent. The kindergarten teacher reported many evidences of inferior fine and gross motor coordination.

Psychological examination revealed that Carl had at least high average intelligence. He exhibited some evidence of difficulty in tasks involving analytic-synthetic ability and visuo-motor skills. During reading tests he was able to recognize words by a whole word approach only. Thus he had developed some sight vocabulary. However, he was completely unable to blend sounds into words. These findings suggested that perhaps Carl belonged to that group of children who show maturational lag. We find that this may be one of the major causes of reading disability and probably of primary significance in his problem.

Thus the manifestations of emotional disturbance which were reported by all of Carl's teachers were to a great extent the *consequence* of the continued emotional strain he suffered daily in school. Reading presented a problem because he was not physiologically ready to learn by the phonic method which was chiefly employed.

With regard to reading, remedial instruction was instituted at once. Methodology was used which did not involve blending of sounds into words. Carl gradually learned to read.

The case of Carl is another illustration where a child was able to profit from reading instruction in spite of his many problems. Actually, Carl's difficulty could have been identified in first grade. He might have then been spared the secondary emotional problems which were an outgrowth of his unfortunate school experiences. In this case psychotherapy without remedial help would have had minimal effectiveness.

A Definitive Program Aids Emotionally Disturbed Children

Let us now consider how Miss Dee, a very conscientious, sincere, warmhearted teacher handled a fourth-grade class of 30 children, all of whom were reading between first- and third-grade levels. At the beginning of the school term, Miss Dee felt overwhelmed and almost defeated before she started because she considered her pupils too disturbed, restless and uninterested to be able to respond to formal instruction.

Since their language ability was limited, she had the children cut out a wide variety of pictures and talk about them to develop vocabulary. The children liked the activity very much, but Miss Dee realized that this was not very valuable in improving reading skills. At this point she requested help.

Miss Dee first needed assurance that she really could reach her pupils through a well-organized program based on their needs. In conferences with her we discussed how emotionally disturbed children are responsive to structure and order in a classroom. Also, how children's anxiety and restlessness may be kept at a minimum when limits are set for them. Furthermore, learning is facilitated when children are presented with meaningful instruction which they can grasp readily. Then Miss Dee was given help in analyzing the extent of the problem through the use of informal word analysis inventories and open book tests. A well-defined program was subsequently drawn up based on test findings. Miss Dee was able to carry it out systematically. She reported during the spring term,

> I never suspected last September that this could have happened. The tone of the class has changed since the reading program was organized. The children's attitude toward reading is positive. Sixteen out of 30 childrn are active public library members. The two poorest readers who were functioning at high first-grade level are now reading third-grade materials. All the children have shown considerable progress.

What has happened from the standpoint of emotional problems and learning? From Miss Dee's observations, there is no doubt that the children in her class exhibited a wide range of emotional difficulties. However, as long as she had no confidence in the children's ability to learn, they sensed this and very little learning took place. For example, in this class when the children were kept busy doing relatively unimportant activities, the teacher unwittingly communicated to the pupils that that was about all she felt they were capable of accomplishing. On the other hand, as soon as Miss Dee was helped to work out a more suitable program and felt more positive about the children's potential for achievement she conveyed to them her faith in their ability to learn. As she felt secure in what she was teaching, the children got a feeling of direction and security from her. Furthermore, their restlessness decreased as she became less permissive and more structured in her approach. With the use of appropriate methods and materials which encouraged learning and with heightened expectations on her part regarding their ability to learn, their competence in all aspects of reading developed.

One can surmise that along with the marked improvement in functioning which this class showed, there were also concomitant gains in personality areas.

We conclude that emotional disturbance need not be a block to reading achievement. This is probably because emotional disturbance is not a static condition. It is always shifting through interaction with the environment. In all of the cases presented, the emotional problems were either intensified or alleviated by the school situation. Since the school plays such a powerful role in the child's life we must continue to search for ways of reaching the child, as early as possible, and building on whatever strengths he has so as to prevent the all-encompassing and destructive effects of failure.

2. Learning Disabilities in Reading[1]

N. DALE BRYANT

Reading difficulties may result from a learning disability or from non-disability factors such as low general intelligence, missed instruction, poor teaching, etc. Disability refers to an impairment—a lack of normal function—which is severe enough to be a handicap. The term disability does not imply a particular cause or even a particular kind of impairment; it merely indicates a relative inability to learn and retain. Inability to learn assumes ample opportunity, including some individual instruction by a competent teacher. If a child with reading retardation and normal intelligence has ample opportunity, tries, but is relatively unable to learn and retain simple materials at his level of functioning, the term reading disability is appropriately applied to him. This is exactly the condition of many children receiving remedial instruction.

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[1] Work contributing to this paper was supported in part by a PHS project grant OM 225 from the National Institute of Mental Health, Public Health Service and also a research grant from the Association for the Aid of Crippled Children.

If the teacher is aware of the complexities of reading disability and has a conceptual framework to view the child's impairment, the child's performance in a learning situation provides crucial information for diagnosis and offers an excellent guide for developing a remedial program. Without understanding and without a conceptual framework, the teacher often overlooks important data and fails to interpret the child's behavior so that it is useful as a guide to remediation.

In considering the nature of reading disability, every teacher should be aware of the following basic concepts:

1. "Disability" is meaningful only with reference to the material and methods used in instruction. A child may be unable to learn by one method but not be "disabled" if a different method is used. However, in learning to read, the normal child shows great ability to learn by almost any method and sometimes without formal instruction. The child who is unable to learn by one method, is likely to have difficulties with other methods.
2. Reading disability is not an entity. It is an extremely variable symptom. Children with reading disability do not all have the same basis, degree, or type of impairment, though there are some characteristics that are common to most cases.

Practically every case of reading disability is a complex interaction of such factors as the following:

a. *A basic cause* (or causes) of the disability (e.g., neurological dysfunction, emotional interference, or confusion from missed or erroneous learning).
b. *A secondary effect* of the disability (e.g., feelings of inadequacy arising from reading failure).
c. *A contributing difficulty* which is not sufficient to cause the disability itself, but is enough to complicate the reading problem and make it more severe (e.g., the secondary effect of feelings of inadequacy may make the child avoid involvement in reading situations and thereby be less responsive to remedial help).
d. *A correlated resultant* which results from the same factors which cause the disability even though it has no effect on the disability nor is it effected by the disability (e.g., neurological dysfunctioning that causes a reading disability can also impair the development of balance and motor coordination).
e. *Incidental* factors which occur in a reading disability sample just as they would in any sample (e.g., it is meaningless to identify that children with reading disability come from homes in which there are frequent family arguments unless a comparable sample without reading disability is found to have fewer family arguments).
f. *Expectations of performance* arising from the child's self-concept, family orientation, subcultural attitudes, perception of boy *vs.* girl role in school, and other socio-cultural influences. (A boy from a lower class home may be under less personal and external pressure to try and overcome reading difficulties than a girl from a middle class, education-oriented family.)

Within the context of expectations of performance, the basic causes and contributing difficulties bring about an impairment in a child's ability to learn. Let us consider the nature of factors causing or contributing to reading disability. The following causes are arranged in order of increasing involvement of the organism so that disability from a more involved cause is almost sure to have elements of all preceding causes.

1. *Confusion from Missed or Erroneous Learning.* The simplest cause for reading disability (and one which is almost always involved even when there are other causes) is confusion and

erroneous learning. Missed instruction, poor teaching, or lack of learning due to other causes (including learning disability) can result in gaps of basic skills and in incorrect concepts that "disable" the child in accomplishing new learning. It might be argued that this is pseudo-disability, but remember the previous point 1: that every disability is meaningful only in terms of the method and materials of teaching. When confusion interferes with the usual methods of instruction, some degree of disability exists. However, unless confusion is maintained by other causes, it is likely to be quickly overcome if instruction is made simple and deals with the problem area. When teaching methods are not adapted to the child's level of understanding and when instruction is not focused on his confusion and errors, this represents *teacher perpetuated reading disability.*

2. *Emotional Interference.* The second cause of reading disability (either basic or contributing) is emotional interference with attention and concentration. Most reading disability cases have emotional problems, particularly feelings of inadequacy, but in order for emotions to be considered as a cause of reading disability, a way in which learning is interfered with needs to be stipulated. Many emotionally disturbed children learn to read easily. Furthermore, emotional difficulties may be present and represent only a contributing difficulty rather than a primary cause.

When the child is obviously *involved and trying to learn,* it is unlikely that emotional factors are a primary cause of the reading disability. The reverse is not necessarily true; the presence of anxiety, fantasy, blocking, or depression do not enure that these are the primary cause of the reading disability. Emotional factors are almost always involved in any case of disability, if for no other reason, as secondary reactions to repeated failure and conflicts arising from the disability. Secondary emotional factors can be a more serious problem than the reading retardation and, in most cases, do contribute to the child's reading difficulties. Reading disability basically caused by emotional factors is likely to be associated with learning difficulties other than just reading and spelling. There are techniques for reducing each of the emotional factors that cause or contribute to reading disability though their elaboration is beyond the scope of this paper. A knowledge of behavioral principles, a warm relationship, and a flexible approach to adjusting the situation so as to modify the child's emotional reactions can provide reduction of emotional interference with learning to read, whether it be primary or secondary.

This is only stating disagreement with Roswell [illegible]

3. *Neurological Dysfunctioning.* A third cause of reading disability, which Rabinovitch[2] has called *primary reading disability,* is neurological dysfunctioning. This can readily be conceptualized by teachers as massive unreadiness. The author has discussed elsewhere[3] a neuropsychological model which provides a basis for understanding the way in which neurological dysfunctioning can produce the defects seen in cases of reading disability. Probably a number of factors can produce a similar kind of neurological inefficiency in the association areas and connections within the brain that serve reading:
    a. *Damage* can obviously produce loss of ability to read (alexia) in an adult and prevent learning (dyslexia) in a child. Damage does not have to be gross to reduce the efficiency of one of the brain's most vulnerable areas of neurological functioning. Pasamanick[4] postulates a continuum of pre- and neonatal damage ranging from spontaneous abortion and infant death through gross brain damage to a much more frequent minimal damage with no gross signs (particularly in the more vulnerable males). Damage results

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[2] Ralph Rabinovitch, "Reading and Learning Disabilities." In *American Handbook of Psychiatry* (S. Arietti, ed.). New York: Basic Books, 1959.

[3] N. D. Bryant, "Reading Disability: Part of a Syndrome of Neurological Dysfunctioning." In *Challenge and Experiment* (J. Allen Figurel, ed.). New York: Scholastic Magazine Press, 1962.

[4] B. Pasamanick and H. Knobloch, "Epidemiologic Studies on the Complications of Pregnancy and the Birth Process." In *Prevention of Mental Disorders in Children,* G. Kaplan, ed. New York: Basic Books, 1961.

from complications of pregnancy, prematurity, anoxia at birth, concussions, and very high fevers. Interrelationship of factors is seen in the fact that prematurity and conditions indicative of possible minimal damage occurs many times more frequently among groups with poor prenatal diet and care—the same group whose children will likely be "culturally deprived."

b. [redacted] are sometimes a cause, but are difficult to differentiate from effects of family environment. Sometimes, reading disability does tend to "run" in families, particularly among male members. Hermann[8] reports that in 45 sets of twins, where one had a reading disability, all 12 of the one-egg twins showed an identical disability, but in only 11 of the 33 two-egg twins, did both have reading disability.

c. In many cases of reading disability, the child appears to be maturing slowly. [redacted]

d. [redacted]

[redacted] No authority.

1. [redacted] (below the norms for his age on the Lincoln-Oseretsky Test of Motor Development—usually not identified in a pediatric or neurological examination).
2. [redacted] or history of [redacted] seven or eight.
3. Abnormal or borderline [redacted].
4. [redacted] with respect to time, size and distance estimation, months and seasons. test?
5. [redacted]

[redacted] This may represent distractability since subjects must fixate for 30". cf Harris p 247

6. [redacted] (ignore details within known words when the words are flashed at 1/10" and even when encountered in sentences).
7. [redacted] as reflected in reading errors and defects in learning new words.

[redacted] have other members of their family who had similar reading disability, have minor visual or auditory discrimination difficulties. [redacted]

Authority?

[illegible] Hermann?

The reading specialist, particularly the remedial teacher, can appropriately ask at this point, "[redacted] This is in contrast to the reliance on the folklore of reading and "magic" procedures and materials that are too common today. Cases with reading disability frequently get years of remedial help without any real improvement in usable skills. The reason is not just the child's disability since brain damage, maturational lag, and emotional interference cases can all make steady (albeit slow) improvement toward usable achievement. The reason for lack of success is often that the teacher is oriented to materials and techniques irrespective of the needs reflected in the child's performance.

[redacted] Authority?

[redacted]

[redacted]

[redacted]

Authority?

[redacted] The methods need only be supplemented by procedures designed to cope with emotional difficulties. In every case of neurologically based disability, the emotional factors must be considered and handled by the teacher. Furthermore, [redacted]

All of these points suggest that [redacted] The keys to successful treatment of reading disability are *understanding* the nature of the child's impairment and *flexibility* in modifying the general approaches to fit the child's needs as reflected by his errors and behavior.

3. Contributions of Reading Clinics to Remedial Reading Instruction

HELEN K. SMITH

Although the extent of the influence of reading clinics upon remedial reading instruction in public and private schools cannot be objectively measured, there are many indications that the contributions have been many and varied. Because clinics differ in their specific objectives and organizational patterns, a number of differences exist among them in practices, procedures, and materials used. Clinics may be sponsored by colleges or universities, public schools, civic and charitable organizations, or private concerns. Even though the orientation of each of the foregoing is different, the common purpose of all clinics is to help individuals, directly or indirectly, become as proficient in reading as is possible.

The chief concern of this paper is with the contributions made by college and university reading clinics to remedial reading instruction in public schools; many of the statements, however, are pertinent to other kinds of clinics which are staffed by competent and well-trained personnel. In addition, schools themselves have made many improvements in remedial reading instructional procedures and should be credited for the strides which they have made.

Teacher-Training Programs

In the first place, university reading clinics are often an integral part of departments or colleges of education and, therefore, play an important role in the training of reading teachers, consultants, and supervisors. The courses in remedial reading and the practical experiences received in clinics are usually part of a larger program in the preparation of reading teachers. Staff members often teach both developmental and remedial reading courses and parcticipate in the entire training program.

They are usually responsible for both theory and practicum courses related to remedial reading. In the basic or theory courses students become familiar with pertinent research and practices concerned with causes of reading disability, diagnostic procedures, and techniques of remedial reading instruction.

In clinical practice courses, future remedial reading teachers, by working directly with retarded readers either individually or in small groups, have the opportunity to use different diagnostic and remedial instruction techniques. When the students in these classes diagnose reading problems, they learn to select and to administer appropriate silent

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[redacted]

and oral reading achievement tests; informal reading inventories; diagnostic tests of word recognition, vocabulary, comprehension, and rate. They learn to identify possible factors which are inhibiting progress by means of tests, such as auditory and visual screening tests, preference tests, and the like. They also learn how to obtain case histories, to prepare case study reports, to interpret test results, to synthesize the diagnostic information, to make referrals to specialists, and to make appropriate recommendations for reading instruction.

In a similar way, students in practicum classes learn how to select instructional methods and materials in accord with the diagnostic information obtained. They become acquainted with published instructional materials and trade books appropriate for retarded readers of different ages and of different interests. Teachers in training usually have the opportunity to prepare some of their own instructional materials. They learn to apply techniques to single individuals and to adapt these procedures to pupils in small groups. As they teach retarded readers, they have the opportunity to see at first hand that diagnosis is a continuous process.

When students in these classes exchange their findings with others, they acquire additional information about different diagnostic and instructional techniques. From firsthand experience they gain insights regarding the following: no method of diagnosing or of teaching is satisfactory for all students; all retarded readers do not progress at the same rate; there is no one cause for reading retardation; instruction can be planned effectively only on the basis of diagnostic testing; and instruction must begin at the reading level of each child. Students in these classes learn the limitations as well as the advantages of tests, instructional materials, and instruments; they become more adept in using the findings of experimentation and research to solve their problems; they determine how they can adapt individual diagnostic and instructional procedures to small-group situations; they learn the necessity of making referrals to and working with other agencies. School systems benefit greatly, indeed, when teachers are equipped with the foregoing kinds of information. Products of such training are unlikely to rely on panaceas and simple solutions to the complex problem of reading.

In a number of university clinics more advanced students who wish to become clinical teachers, directors, consultants or supervisors, or college or university teachers have opportunities to serve as interns. Through this provision, they broaden their experiences by working with elementary, high school, and college students who have a wide range of different kinds of reading problems. In many clinics, staff members who are advanced students in reading serve internships as clinicians, diagnosticians, or assistant directors and thereby greatly broaden their background of experience.

University clinics have other kinds of intern programs in addition to staff positions. For example, the doctoral candidates at the University of Pittsburgh may elect an intern program which involves supervision of reading or the teaching of developmental and remedial reading classes in or near Pittsburgh. At the University of Chicago the new Master of Science in Reading program, designed for the preparation of reading consultants, provides a one-year intern program with each student spending one quarter in the Reading Clinic.

In addition to participating in intensive teacher-training programs, clinics also help other teachers who are enrolled in departments of education develop insights into the problems experienced by retarded readers. Staff members often provide demonstrations of diagnoses and remedial reading instructional procedures for language arts classes, workshops, and conferences; and give talks or lead discussions for students in pretraining sessions.

Services for Retarded Readers

The second way in which clinics serve the public schools is through their contact with teachers and other school officials whose pupils have been referred to the clinics. The diagnostic reports, prepared by clinic members, give direct guidance to teachers concerning the nature of the reading disability, the factors inhibiting progress in reading, and the specific instructional needs of each student. By specifying the kinds of information that are needed in understanding each case, the clinic directs the teacher's attention to the needs of the child who was diagnosed and to those of other children who have similar problems.

Clinics also teach students who are so severely retarded that they cannot function in a regular classroom situation. Some clinics combine instruction with other activities, such as the Reading Camps sponsored by Syracuse University. Many students, after receiving special remedial reading instruction, can gradually be helped to make the proper adjustments to regular classroom instruction.

Clinic staff members frequently meet with school officials or teachers to discuss the diagnostic findings and the results of remedial reading instruction and, in this way, perform a valuable kind of personal in-service education for each teacher.

Dissemination of Information

Clinics act, in the third place, as a center for the dissemination of information and knowledge concerned with all phases of remedial reading. They perform this function by means of conferences, publications, lectures, exhibits or reading curriculum centers, and informal contacts.

Some clinics, such as the ones at the University of Pittsburgh, the University of Florida, and the University of Delaware, sponsor annual conferences concerned with various phases of reading, including retardation in reading. Others, such as the University of Chicago Reading Clinic, are responsible for conferences at intervals when specific problems in the clinic are identified. Clinic personnel also participate in various conferences throughout the country, including local council meetings and the annual meetings of the International Reading Association.

Publications totally or partially prepared by clinics include proceedings of conferences; monographs, such as *Clinical Studies in Reading I* and *II*[1] and the forthcoming *III*, which include reports of research done by graduate students and staff members and the proceedings of conferences sponsored by the clinic; contributions to *The Reading Teacher* and to various other journals concerned with reading; and published lists of books appropriate for retarded readers such as *Good Reading for Poor Readers*.[2]

Clinics prepare for their own use, from time to time, bibliographies on various subjects. Requests often come to clinics for such information as the names of tests, trade books, instructional materials, professional books, references on specific topics, materials to be used in the content areas, and books or pamphlets useful in interpreting reading programs to parents.

Some clinics maintain exhibits or curriculum libraries of materials appropriate for remedial reading instruction, such as tests, workbooks, trade books, kits or laboratories, games, and charts. Files of publishers' catalogs of books, instruments, records, and films are also available.

Innumerable informal contacts with clinics are made by school personnel, such as by telephone calls and by mail. A typical correspondence file includes requests for aid with specific kinds of learners or problems not fully understood, such as reversals or mixed preference; and requests for information about such things as readability formulas, names of specific materials or publishers, suggestions for establishing or improving remedial reading programs, an evaluation of various materials or devices, and the names of clinics in different sections of the country.

Closely allied with the foregoing activities, clinics provide, in the fourth place, various kinds of consultation services to schools. Staff members are often asked to speak at institutes, workshops, and faculty meetings and to participate in or to direct in-service programs, especially those related to retardation in reading. These may be one-time contacts such as the joint all-day institute sponsored by the University of Arizona which involved the reading teachers and the counselors in a school system for the purpose of clarifying the relationship of guidance and reading. As a result, a bulletin for guidance departments was prepared. On the other hand, some clinics such as the one at the University of Florida have long-term consulting arrangements with specific schools to assist in solving local problems. Through such contacts, classroom and content area teachers, as well as remedial reading teachers, are made aware of their responsibilities for the improvement of reading of their pupils.

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[1] Helen M. Robinson, *Clinical Studies in Reading, I, II*. Chicago: The University of Chicago Press, 1949, 1953.

[2] George D. Spache, *Good Reading for Poor Readers*. Champaign, Ill.: The Garrard Press, 1962.

University clinics often help other colleges or universities to establish their own clinical services, which in turn perform many of the same duties as other clinics do. In addition, clinics are also called upon to evaluate existing remedial reading programs or to aid schools in developing new ones.

Research and Experimentation

A major way in which clinics have helped to upgrade remedial reading instruction in elementary and high schools is through the research or the experimentation done in these clinics. Clinics are willing and eager to share their findings with others. As a result, knowledge or insight gained can be directed to remedial reading teachers, who, in turn, can be encouraged to carry on experimentation or research in their own schools.

University clinics find it possible to do research because of the available facilities and the highly trained personnel. It is possible for such clinics to cooperate with specialists in other disciplines in designing and carrying on research and interpreting the results. Much research has been done in reading clinics concerned with causes of reading retardation, relationships between various factors and success in reading, appropriate instructional procedures for specific kinds of learners, norms for different evaluation instruments, and the advantages and disadvantages of equipment, such as pacing devices.

Outstanding research has been done in clinics. Robinson's study[3] showing that there is no single cause for retardation, Buswell's study[4] which paved the way for instruction in speed of reading, and Harris's work[5] on lateral dominance are examples.

In addition to the foregoing, the results of research done in clinics have brought about new tests, such as the *Word Discrimination Test by Huelsman* (Miami University Alumni Association); *Harris Tests of Lateral Dominance* (Psychological Corporation); the *Binocular Reading Test* by Spache, now a part of the *Keystone Binocular Reading Test;* the *Roswell-Chall Diagnostic Reading Test* (Essay Press); the *Silent Reading Diagnostic Tests* by Bond, Clymer, and Hoyt (Lyons and Carnahan); and the *Learning Methods Test* by Mills.

Most clinics carry on experimentation of various kinds. Because clinic personnel are devoting their full time to reading, they usually have more opportunities than teachers do to try out, evaluate, and compare tests and instructional materials. They prepare some of their own tests and often permit teachers to use these tests, especially if test data are returned to clinics so that norms can be established. Experimentation in clinics has also led to the construction of instruments, such as tachistoscopes and pacers.

An indirect way in which clinics contribute to remedial reading instruction in public schools is by interpreting reading programs and problems to the lay population. Many clinics hold joint conferences with such professional people as refractionists, pediatricians, and neurologists to clarify various issues. Often clinics help parents understand their role in the whole instructional program or issues which are unclear to them.

Developmental reading programs have also profited by the contributions made by reading clinics. By learning about the multiple causes of retardation and the individualization of instruction for these students, teachers gain insight concerning preventive measures they can take in their classes.

Although both clinics and schools have done much to upgrade reading instruction, both corrective and preventive, we cannot permit ourselves to be satisfied with these efforts. There is a dearth of well-trained remedial reading teachers. Evaluation instruments of merit, appealing and thought-provoking instructional materials, new approaches for teaching small groups, and effective methods for teaching atypical pupils are badly needed both in clinics and in schools. Most of all, we need superior teaching of developmental reading at all grade levels so that some of the reading retardation can be eliminated.

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[3] Helen M. Robinson, *Why Pupils Fail in Reading.* Chicago: The University of Chicago Press, 1946.

[4] Guy T. Buswell, *Remedial Reading at the College and Adult Levels—An Experimental Study.* Supplementary Educational Monograph, No. 50. Chicago: The University of Chicago Press, 1939.

[5] Albert J. Harris, "Lateral Dominance, Directional Confusion, and Reading Disability," *Journal of Psychology,* XLIV (October, 1957), pp. 283-284.

4. The Future of the Reading Clinic

ANNE MCKILLOP ROBERTSON

A few years ago Reading Clinics seemed to be on the way out. Their task was to be taken over by skilled classroom teachers. "We won't need any clinics when teachers really know how to teach reading," was the cry. "Prevention" was the password. Recently we have seen a change and this change seems to be stable. Reading Clinics are here to stay, *not* because teachers are not doing a good job, but because our vision is clearing and we are better able to focus upon different types of difficulty. Reading difficulty is no longer one blob of buzzing confusion, but a series of identifiable entities (with much overlap to be sure). It is becoming clear that teachers, no matter how skilled, cannot cope with certain reading difficulties in the regular classes. Even specially trained reading teachers with groups of ten to fifteen children find youngsters they cannot help. The clinic is needed.

But what is a clinic? Almost any reading service can be and has been called a clinic. Perhaps one of the important tasks of the future will be to define "clinic." In the meantime we can identify several types of clinics and discuss their possible futures.

In the first place, there is the clinic organized in connection with one or more departments of a university, or college. Usually these clinics are found in teachers' colleges, or schools of education, but an increasing number of them are being developed in association with other university departments such as medical schools. The usual major functions of such clinics are to provide opportunities for students to test and teach reading under supervision, to demonstrate effective teaching techniques, to evaluate new proposals, to maintain collections of materials, and to offer staff and students opportunities to test theories.

Such clinics usually provide training for two types of students; those who are primarily teachers, and want to be better teachers of reading in their own classrooms or to teach reading to poor readers in the regular school setting; and those who want to become specialists in helping children with unusual difficulties in reading, children with what may be called specific reading disabilities. It is evident that these two groups of students require different experiences, different types of children to work with, and different supervision. I would reserve the name "clinic" for the part of the service which deals with the specific and serious difficulties, and call the more general part of the service "reading laboratory," "reading center," or "reading service." Such a differentiation of service and training will, I believe, become much more marked in the future, and will lead to differentiated facilities, practices, and personnel.

If university and college clinics are to fulfill their functions as teaching and research centers they must be free from financial pressure so that they can accept the best teaching cases regardless of the client's ability to pay. To expect such a clinic to be financially self-supporting is to defeat its purpose. I believe we shall see acceptance of this point of view in the future.

As the domain of the clinic becomes more clearly identified, I believe we will see increased cooperation among various university departments. Medical, psychological, and educational personnel will pool their knowledge, skills and questions as they work together in the clinic.

A second type of clinic which we can identify is organized by a school system to serve its own youngsters. In the future I believe we shall see an increase in the number of such clinics, and that these clinics will be separate from, although related to, other aspects of the school reading services. These clinics will have highly trained specialists on their staffs and will have extensive consultation service available. They will work with only a small number of children, those whose reading difficulty seems to require specialized teaching techniques; they will often work with children individually; they will provide a variety of services, both diagnostic and remedial. Research may be an important part of such a clinic's program but often this will be administrative in nature, seeking answers to practical problems in the actual situation, rather than investigating theory.

A third type of clinic is operated by a social agency, hospital, mental hygiene clinic, court, etc. as part of its service to clients. In the future, I believe we shall see a decrease in this type of clinic as the schools develop clinics of their own, and as the schools differentiate more skillfully among the children with reading problems. It would probably be unfortunate if such clinics were to disappear altogether, since there are some youngsters whose school failures have been so severe that their best chance of learning is in a situation far removed from the school. There are also instances where the reading help is most effective when integrated into the help given the whole family by the social agency. In general, however, the work done by such clinics seems to be the job of the school and to be best done there. Realistically, these clinics will need to continue for a long time, and indeed, increase their services until the schools can take over.

Private clinics constitute a fourth type of clinic. These operate in many different ways and offer service which ranges from questionable to excellent. As more schools offer better and more differentiated clinic services we can expect private clinics to decrease. Such as do remain will probably offer either a general program of reading improvement for even the good reader, or highly specialized service for the child with a specific disability.

It is often argued that there is a need for private reading clinics just as there is a need for private dentists despite the many dental clinics operated by schools. Such an argument seems fallacious. The school is responsible for the child's dental care when the state of his teeth interferes with his learning in school. It may also, for the sake of convenience, offer its facilities for dental examinations for children. Reading, however, is different. The main function of the school is to promote learning, and reading skill is basic to this. The school cannot escape its responsibility.

A fifth type of reading service sometimes goes by the name of clinic. This is the service offered by a church or neighborhood group and staffed by volunteers. The rapid increase of these programs raises some difficult problems. Certainly the need for reading help for children in underpriviliged areas is great; there is a large reservoir of intelligent citizens with the time and the desire to help. How can this reservoir be tapped? To discount the possibilities of such services is foolish; to call them clinics is misleading. What can volunteers do? They can offer to the child the same kind of help and support which they would offer to their own children, and which the parents of many of these children cannot offer. They can provide a listening ear, a pattern of school speech, an interested and approving smile. They can read and talk to children, take them to interesting places, prove that someone cares about their reading. All of these are very important. But to ask volunteers to work with children who can only learn by special methods is to ask the impossible and to add to the failure of an already failing child. The temptation is to have the volunteers work with the children who are farthest behind, whose need is greatest, and yet these may be the ones they are least able to help. The problem of identifying the children whom the volunteer can best help is a difficult one, calling for keen professional skill.

If the reading clinic of the future is to offer highly specialized help to those youngsters whose difficulties are serious and specific, it is evident that more skill in diagnosis than we now have is needed. It is not enough to identify the reading skills which the child lacks, or even to catalog his strengths and weaknesses. Two children may show identical patterns of difficulty and one may profit from good teaching of the usual classroom type tailored to his needs, while the other may still continue to fail despite the teacher's skill. He may need quite a different approach, one which, for example, uses several senses in presenting new words. Increased skill in identifying the roots of the difficulty are needed. Perhaps the greatest problem is to identify those children who do need highly specialized techniques.

Another implication of what has been said is the need for increased facilities for training teachers and specialists. Three types of skilled personnel are needed. First, all teachers at all levels in all subject areas need to know about the reading process and to have some skill in teaching it. Second, some teachers need special skill in teaching those children who have difficulty because of poor previous instruction, or because of gaps in instruction, or because they cannot learn effectively in a large group, or because of their paucity of experience, or because of any of the other common sources of difficulty. But a third group of specialists must be provided for the clinics, specialists who are familiar with a wide variety of techniques, and most important of all, who know which one to use with which child. These clinic specialists need to be good teachers but more than good teachers; they need to be skilled diagnosticians, well-informed and efficient technicians with a perceptive and flexible approach to children.

A final word. If the reading clinic in the future is to be effective in helping these children with specific reading disability, there must be clear communication between the clinic and the classroom, between the reading teacher and the clinic worker, between home and school.

5. Improvements Needed in Reading Clinics

PAUL C. BERG

There is some difficulty in suggesting improvements for an area which offers experiences of as diverse a nature as do reading clinics. According to Harris, because reading clinics do vary so greatly in their specific objectives, their organization, and in their modes of functioning, it is impossible to give a generalized description of how they work.[1] For example, purposes and needs may dictate quite differently if a clinic is organized under the direction of a college or university, under a charitable organization, a public school system, or as a private venture. However, a definition that may be generally applied to all classes of reading clinics is that they represent "an organized group of people whose primary function or purpose is helping individuals become better readers."[2]

Definition of Clinic's Role

Perhaps a first concern regarding improvement should deal with reviewing the role or purpose of one's particular clinic. For example, does the director's concept of the role of his clinic agree with the sponsoring agency and the clients for whom the service is furnished? In a clinic in which the sponsoring agent is a school of education, as is mine, various decisions relative to a client may be quite different from those made were the sponsor a commercial establishment or a clinic within a particular school or school system. In the school of education setting, diagnosis is not going to be continuous over a period of time as a diagnosis should be which is made within the public school setting. Neither can our remediation be carried out over as long a period of time as may be the case in the school clinic. Other differences in role expectancy might also be mentioned, including the fact that in a school of education program, some training for graduate students is assumed and the work is at least partially subsidized; thus fees are usually kept below what a private clinic must charge. Our first suggestion is, then, that continuous improvement can come only through continuous evaluation of the definition of our over-all role or task with a willingness to modify and experiment as it seems indicated.

An important aspect of this ongoing evaluation is feedback from both clients and staff, as well as agreement as to the purposes and needs of the sponsoring organization. Robinson and Smith[3] reported in the *Elementary School Journal* in October of 1962 that a ten-year follow-up study of the reading services at the University of Chicago was the first of its kind to be found in the literature. Yet the client is the best source of information.

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[1] Albert J. Harris, "Reading Clinics," *The Reading Teacher*, Vol. 14, No. 4 (March, 1961), pp. 232-235.

[2] *Ibid.*, p. 232.

A second type of continuous feedback or evaluation may come from the clinic staff if a method of fostering such a feedback is maintained. At the University of Florida, at least when I was on its staff some years ago, follow-up and feedback relating to clients was maintained through weekly reading clinic staff meetings and also through regularly scheduled meetings with other cooperating agencies.

Definition of What Reading Is

Not only should the definition of our over-all purposes be open to modification and change through feedback from sponsor, client, and staff, but there must be a definition or philosophy of what reading is, and this philosophy should be inclusive of our total practice in the clinic. Such a definition or philosophy should act as a criterion for decisions regarding selection of diagnostic techniques and remedial and developmental materials and their use. For example, we may give lip-service to critical or creative reading, yet our tests measure only memory for details and main ideas. We may, on one hand, claim to hold a certain philosophy relative to the proper use of machines or other aids to the reading program, yet in actual practice we allow their use in a way quite unrelated to our own stated concepts. Relative to diagnosis, we may allow our procedures to become so static that the same instruments are used over and over, regardless of our philosophy or the apparent problems of the client; the same causes for reading failure are seen in these diagnostic results time after time; and the same remedial techniques and materials are used, despite the diagnostic findings in the first place. Where there is this problem of riding habits at the expense of more discriminating practices, or where bits and pieces of unrelated information are used to create a patchwork remedial program, there should be a redefinition of our philosophy about reading, or at least a reintegration of our present philosophy should be more closely followed.

A Multidisciplinary Approach

It must be remembered also that the educational reading clinic is not in most cases staffed so as to offer as broad a diagnostic or therapeutic program as the personal deviations of a single client may demand. Therefore it is a normal temptation to use our diagnostic instruments simply because we have them and "make do" with the remedial materials at hand regardless of the fact that they may not exactly fit our client's needs. Where such occasions exist, a multidisciplinary approach can be most useful. Close cooperation with community and state agencies will multiply many times the resources of our work and make our philosophy more applicable to actual practice. In South Carolina, for example, we have mutual agreements with many state and community services for both diagnosis and remediation. Through cooperative case work, we are able to observe many diverse facets of the client, yet we are not individually attempting to diagnose or give guidance in areas which are outside our major area of professional skills. For example, while the reading clinician should be familiar with projective techniques, he probably is not the best person in a cooperative setting either to give or interpret instruments of this nature. To quote from Spache, "learning to use even a complex projective test is of little value if it results simply in psychometric description of the individual. The results must be meaningful to the examiner's concepts of personality, they must aid in understanding this individual's behavior and inner feelings as being different than another person, and they must suggest ways of treatment."[4] Thus, instead of sweeping the whole problem of personality adjustment under the rug and playing that it doesn't exist, or, on the other hand, attempting to deal with it incompletely and inadequately, a reading clinic in touch with the facilities of a counseling clinic or mental health center can make referral and, in continuing contact with the referral clinic, can work within the range of its own professional know-how and with the knowledge that all known areas of difficulty of the client are being treated.

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[3] Helen M. Robinson and H. K. Smith, "Reading Clinic Clients; Ten Years After," *Elementary School Journal*, 63 (October, 1962), pp. 22-27.

[4] George Spache. *Toward Better Reading*. Champaign, Ill.: Garrard Publishing Company, 1963, p. 121.

Continuing In-Service Training

Another characteristic of a program open to continuing improvement is one whose staff is not only initially well trained in its own particular clinical role, but continues to maintain this position by evaluation of its tasks in the light of professional reading, staff conferences, experimentation and research, and feedback from the learners themselves. Through a questionnaire study, Margaret Early discovered that students reported that their needs were not being met in learning accurate pronunciation, in speed of reading, reference skills, finding main ideas, and in ways to increase vocabulary.[5] While this particular study was made in a high school developmental program, it still illustrates the point that feedback from students can help to evaluate and thus modify our work.

Again referring to the weekly staff meeting as a source of improvement, this time can be spent not only for feedback, but for discussion of current research reported in the literature, and planning research projects.

Clear Communication

One of the major ways a clinic is judged by the public is through its communications, usually in the form of written reports. If, as we have suggested, the clinic's over-all role or purpose is understood, there is a functional definition of reading, and a well-trained staff continuously engages in opportunities for in-service improvement, then the clinical report from such a setting should be clear and to the point and communicate to the reader to whom it is addressed exactly what action the diagnostic findings of the clinic recommend. Fuzzy understanding of our role and our professional skills creates reports full of pedagogical terms and vague generalities, neither very useful to the distraught parent or harried teacher. Perhaps we might suggest that if an idea cannot be communicated in language understandable to the reader we haven't fully understood it ourselves. Sometimes we probably also simply forget that terms common to our field are unknown to the average layman. Such words as exophoria, dominance, and decibel are mysteries to many parents who read our reports.

A comment may also be made here regarding what we communicate to the person to whom we are giving instruction. Do we communicate the idea that we are trying to help him create an active dialogue between himself and the ideas of the author, or do we rather communicate a feeling that reading is for reading words, a prescription for technical know-how, rather than a process of inquiry? A difficulty inherent in this task is that while there must be direct instruction in the skills needed to be taught, we should beware of unrelated drills, make-believe exercises, and the like. Even at the higher levels of reading instruction it is easy to teach rate of reading, vocabulary building and all the other skills as discrete and separate, without emphasizing the interrelatedness of each with the other, and the whole forming together to produce a maximum of thought for the time expended. The plethora of workbooks, machines, and teaching devices for reading available to us may actually tend to separate and pull apart rather than to show reading as a systematized process of entering into a dialogue with a writer.

Related to this problem of adequate transfer from skills-teaching to the dialogue of reading is the tendency to stop short of what has come to be known as the "higher literacy," or the art of critical and creative thought. Francis S. Chase says that "we must in our decade, win through to higher ground, another plateau upon which man can again operate, leaving below the narrow confines and crevasses of untenable cultural and social attitudes and knowledges. . . . I believe that the way reading is taught, the content of ideas available to the reader, and the encouragement given to rational inquiries, especially in the social domains which up to now have been little influenced by such inquiries, offer means of unraveling the great complexities of the sixties."[6]

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[5] Margaret J. Early, "What Do They Want to Learn," *English Journal*, 44 (November, 1955), pp. 459-463.

All of our striving and all of our improvement should ultimately point toward the prevention of reading disability. This will include help to teachers in the field and teachers still in training; it will include consultative services to schools, workshops, and any other method at our disposal that will help the teacher to set his goals to teaching for a higher literacy. This suggests not only the improvement of reading at the elementary levels, but will include promoting more interest in reading instruction at the high school level. Sponsoring conferences and workshops to help high school teachers with their classroom reading problems, lobbying through local and state educational organizations for certification requirements in reading at the high school level, and sponsoring programs for high school teachers through the local IRA Chapter will all help to further interest.

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[6] Francis S. Chase, "Demands of the Reader in the Next Decade," Helen M. Robinson, editor, "Controversial Issues in Reading and Promising Solutions," University of Chicago, *Supplementary Educational Monographs*, No. 91, 1961, p. 17.

I. Developing Lifetime Reading Habits

1. As the Bee Goes to the Flower for Its Nectar

CHARLES G. SPIEGLER

Reverence for the printed word was rarely expressed more movingly than in a recent New Yorker (2/22/63) piece in which the writer, grieved by the paralyzing newspaper strike said:

> The view of the strike as an economic disaster misses (an) important point . . . for it ignores the rich sustenance, the elusive yet almost essential nourishment, that the city reader draws, morning and evening, from that printed bread loaf he carries under his arm. . . . Without his newspaper he has been subtly starving, and he senses within himself the loss of well-being, the dullness, the suspicion, and the silence of the exile. . . .

Having once tasted the joy of the printed newspaper word, we cannot, forever after, live happily without it. And, as for literature, it is to Arnold Bennett "first and last a means of life. . . . People who don't want to live, people who would sooner hibernate than feel intensely, will be wise to eschew (it). They had better sit around and eat blackberries."[1]

The hibernating blackberry eaters in this, "The Affluent Society," far outnumber the book lovers. Only 17 per cent of our people (compared to 31 per cent from Canada and 51 per cent from England) can, on one survey answer "yes" to the question "Are you now reading a book?". "Only one person in ten," says Professor Harry C. Bauer of the University of Washington who has studied our citizenry's reading habits for four decades, "is what I would call 'bibliographically inclined',—that is a patron of a book store or a library." Talk to the 200 Oxford, Miss., oldsters interviewed in 1960[2] and only 80 read books and, even these, on an average of 30 minutes daily.

Let no one speak of cultural deprivation as a modern phenomenon. It has been with us since the beginning of time.

Today, as never before, we have launched a frontal attack on those conditions which, in the past, have divorced children from books, that none but the hard core of the disaffected, the ignorant and the slothful can help but be touched by it. Publishers have given us a Golden Age of Writing—a Golden Age of Illustration for youth, with, literally, thousands of volumes that can bring "Goose-flesh and glimpses of glory" to students ranging from the smallest knee-high-to-a-grasshopper-kindergartner with eyes to see and ears to hear—to the tallest, most sophisticated High School senior. The Paperback Revolution with its infinite number of outlets (including 3,000 Paperback Bookshops in schools across the land) has made it possible at little or no more than it costs him to down a malted milk, for a youngster to buy anything from *Ferdinand the Bull* to *War and Peace*. Bill Boutwell's Student Book Clubs from *Arrow* to *Campus* to *Lucky* to *Teen Age* boast a membership which the best of the best Adult Book Clubs would give their eyeteeth to own. Librarians the country over stand in a Team Teaching relationship with their colleagues on the firing line never as solid as on this day. Even the TV networks, the oft-maligned target of our profession, are in a happy and fruitful alliance with us to make readers out of viewers. Finally, and *most* important, many teachers have themselves caught the message that "Interest is the key to reading," and that, as America's Reading Dean, Dr. Arthur Gates, put it to me way back in 1955, "the mechanics we teach are but the springs and spindles in a lock. Only interest," he averred, "will turn that lock and open the door to the world of fun, information, escape and wonder that reading can be—."

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[1] Arnold Bennett, *Literary Taste*. New York: Doubleday, 1937.

[2] Jere Hoar, "Book Reading in the Senior Years," *Journal of Educational Sociology* (November, 1960).

I have an absolute faith that in this, "The Affluent Society," we can erase the blot on our escutcheon of men and women who, like the oldsters in Oxford, Miss., turn, in the twilight of their lives, to anything but books—when lights are low and shadows fall; of men and women whose reading development is so tragically arrested that they read, at 70, the very same trivia they read when their hearts were young and gay.

My own personal faith is founded on nearly a decade of experience with hundreds of boys like Tommy Trainor, a young 16-year-old butcher boy in my school of 900 future butchers and bakers and cooks and maritime workers. When I first met Tommy, I recall, he reminded me of Paddy Chayefsky's "Marty"—the dull, limited kind of lad whose life was dedicated to learning how to make a living but not to learning how to live. He had, for example, never, never voluntarily read a book, cover to cover, in all his 16 years! So we began by allowing him, as a starter, to read *any* book he could find *anywhere*—in a library, in a drugstore, on any dust-laden bookshelf he could reach at home, at a friend's, *anywhere*. I'll never forget the quizzical look on his face when I made him this offer. "Are you kiddin'?" He said. I wasn't. And soon he was reporting on a monstrosity called *Tough Kid from Brooklyn* (Avon):

> It was about two bums and a kid, and it told about how they lived moving from place to place—not knowing where their next meal was coming from. I learned something from this book—that no matter what I turn out—I will never be a bum.

I took him at his word and introduced him to a group of men he could "model himself on": to Wild Bill Hickok and Buffalo Bill and Kit Carson—that lively crew of American heroes which "The American Adventure Series" (Wheeler) has enshrined in fast-moving, simply written, action-packed stories. Before long, Tommy had become an avid reader of historical biography. Soon he had taken his first public-library card. And, shortly after graduation, I got this letter from Tommy:

> I feel like a person starting to smoke. First he just grabs a butt or two—then he gets into the habit—and starts going to the candy store for a pack. Soon he wouldn't be without a cigarette—that's how it is with me and books now.

We need no more additions to that now still-faceless mass of school failures and dropouts that James Conant already sees shaping itself into a massive keg of Social Dynamite which, ignited, bids fair to explode upon us all.

So we must all, and especially those of us who deal with the art and skill and love of reading, play a role in the face of this danger. "Three times as many poor readers as good readers drop out of high school before graduation," says Ruth Penty.[3] We can stem that tide, but not before we develop more creative insight into what Robert Havighurst calls "The Forgotten Third" which, let's remember, swells that tide.

Most of my boys live in an intellectual ghetto. Talk at home is largely of the "who's gonna win the fight next week?" variety. Glued to the Western and crime shows on TV, interested mostly in sports talk, the movies, girlie magazines and dates, no more than 20 boys in my school have found it worthwhile to take in a Broadway play or a concert at Carnegie Hall, even though both are little more than an hour from any boy's home. "That's for eggheads," Billy Brenner, 16, tells me when I offer him a ticket. "It's too far anyhow. Aah, you come home too late." Yet two nights a week religiously, instead of sitting down with his homework, he marches to the bowling alley.[4]

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[3] Quoted from *The Journal of National Association of Women Deans and Counsellors* (Date unknown).

How feeble and pale our approach to the reading needs of such boys can be is beautifully illustrated in a series of cartoons drawn by one Jules Feiffer (The Hall Syndicate, Inc.). We meet here two hulking lads sitting in a Remedial Reading room, awaiting the lesson, and chatting, while they wait, about their Big Love—Automobiles. Asks Ted (the first boy) of Mort—

"What do you think is better, the '62 or the '63 Corpus?"

Mort answers: "Dad had a '62 but the Cam shaft kept losing fluid, which affected his turnover rewipe. Rather than reorient, he traded her for a '61 Breakage."

Says Ted, "My dad had a '62 Breakage. Where they filed down the head points and rewired the valve slab in order to double the gas take—."

"Sure," nods Mort—"but then you have to compensate the fraction-loss by rerigging the oil jam. And that almost always leads to flotsam slippage. I don't recommend it."

The high level hot-rod talk continues with Ted admitting, "What I'd love to drive is the 'Ambulatory 8'," which he knows is a lemon, "but if you shorten the quarter rods, and vale balance the hoops you can totally eliminate skim."

At which point enter Remedial Reading teacher who stops the conversation short, turns to Mort whom she directs to "—please read to-day's English assignment." He rises, opens his book, and with unmistaken "bore me deadly" voice begins—"Look . . . at . . . Dick. Dick . . . has . . . thee . . . ball. Tom . . . wants . . . thee . . . ball. Run . . . Dick . . . run."

Small wonder then, that when the flag is down and the coast is clear, youngsters like Ted and Mort, themselves two souped up Hot Rods, will indeed run—nay roar beyond the school gates, perhaps forever—and into the road race that Life is—unread, unready, and unskilled, two more of the Wild Ones that already warn of Danger Ahead!

In my own school, and in many others beginning to see the light, Ted and Mort would have been given a sporting chance to survive. Even in our Remedial Reading classes, instead of rubbing that silly kid stuff "Look at Dick . . . Dick has the Ball" into their eyes, we have supplied materials of enormous interest to adolescent boys, yet on a reading level within reason. Thus, while they are learning all about context clues, and finding the main idea in a paragraph, and all that, they are also *reading*—and identifying with *The Daredevils who Follow the High Steel* about the Mohawk Indians who build our bridges and skyscrapers; and *themselves* taming the raging beast that high voltage electricity can be in *The Romance of the High Line;* or even taking *A Ride Through the Sound Barrier*, three of many wonderful articles that the Readers' Digest Educational Services have pulled together in two attractive soft-covered volumes called "Help Yourself to Improve Your Reading." They are not only learning to read, they are reading because they are motivated to read, and are given access to materials of the *Readers' Digest* type, like that in Elizabeth Simpson's *Better Reading Books* (SRA), similar to Rita McLaughlin's *The Literary Sampler.*

We perform the marriage between the motivated reader, eager, and the right books, accessible, not only for Remedial Readers, but for all students. It is a marriage between two elements that can make a lifetime reader.

Walk into some of my English classes and see for yourself. The forbidding tones of yesteryear are absent. *Silas Marner?* Gone! Most to the repository. Some to boys building home libraries. Some to my office. Whatever value old Silas ever had for college-bound youngsters, for mine he was pure sleeping pill. Even when awake students talked of him in terms as dry as a spinning wheel. In his place, among other things, are (if you will excuse the expression) the Anthologies. Let others condemn these as the enthronement of snippets produced by a hyperactive scissor and some paste. I know better. As one who took four long but exciting years in the preparation of one such a volume, as one who exhausted clean many a University Rare Book Room in his quest for the best, I'm pretty sick and tired of those who denigrate *all* anthologies.

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[4] From my own article "A Teacher's Report on a 'Tough' School," *New York Times Magazine*, November 24, 1957.

I do not mean to suggest that we limit ourselves to the anthologies. There are longer books which will respond to a student's nature, attract his eye, help him dream. *Kon-Tiki,* for example, with its daring young Heyerdahl on the perilous Pacific, is for us a modern-day classic, not because someone dubbed it so, but because my boys see in it the madness and the glory and the thrill of adventure dear to any boy's heart.

Nor is the established classic taboo. *Julius Caesar can* be a deadly fossil, when all it becomes is an exercise in vocabulary, or pure *explication de texte* or a manual training project on Shakespeare's Globe Theatre or the Roman Senate. "The fault," to paraphrase Cassius, "is not always in the literary work, but in the treatment it gets" that determines a class' appreciation of it. We read *Julius Caesar* as a vital study in authoritarianism, with excitement uncontained (can we do less in a divided world already eyeball to eyeball at the barricades?). My boys do not get all the language or flavor or spirit of the play, to be sure. Nor do they explain its subtleties with gentility. Enough for us that when Cinna the poet is destroyed for no reason other than that he owns the same name as Cinna the conspirator, our students can raise the cry of "Foul." Our classroom Literature program, in short, will employ those literary works we deem worth knowing—no matter the format (anthologies, full-length books, hard cover or soft).

The first book report selection in my school comes in this rather off-beat form.

"For your first book report, I give you no prescription except to visit your library. There you may browse until you find a book of fact or fiction that strikes your fancy. Check it out with me. Read it. Report."

Stunned somewhat by the freedom of my assignment, students recover quickly, and the questions begin to pop.

"Any book—even a sports story?"

"Yes, any book."

"What about a thin one?"

"Why not? That's no bar."

My "yes's" and my "why-not's" are the most disarming way I know of moving large bodies of students (including the bowling-alley and the ice-cream-parlor set) into the library, with a minimum of resistance and in the mood of freewheeling adventure which I want to capture.

I would be less than ingenuous if I reported that all my students return bearing books to charm me. Many leave me most disenchanted. But, though I lose a few skirmishes, I eventually win the war.

There are, of course, the hares you can't ensnare. They won't be caught dead within a library. So we bring the library to them—through our "Miss Bookmobile" (as we have dubbed the lovely lady who comes to us at regular intervals with her bagful of books meant to move the most immobile reluctant). She talks of these not as if to boys in a classroom, but as if to campers 'round a fire. She weaves a web of silent awe that books can say such wondrous things . . . of *D-Day* and *Shark* . . . for those whose tastes run to blood; of *Body Building* and *Weight Lifting* for those to whom a thing of beauty and a joy forever is the Body in bloom; of a book called *1975: and the Changes to Come* (by Arnold Barach) for those who dream of a future better than their here and now. When she stops, invariably, there rings out a cheer from those who had come to hear and sneer. And boys gang up around the desk grabbing lists with more of the same kinds of books just described; and vows will be muttered, low but sincere—"sounds like a good deal, that library."

It is, in fact, at our Book Fair,[1] at which for three days, while classes are canceled and our boys come to browse and buzz and buy (or not) from the many thousands of books we have brought together in one vast treasure house, that many students will begin to feel about authors the way Holden Caulfield, you remember in *Catcher in the Rye,* feels about Isak Dinesen whose *Out of Africa* was one of those books that "really knocks me out—it's a book when you're all done reading it, you wish the author that wrote it was a terrific friend of yours and you could call him up on the phone whenever you feel like it—I wouldn't mind calling this Isak Dinesen up—."

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[1] Conducted by Mogra Book Distributors.

My boys wouldn't mind calling Quentin Reynolds up, after reading his *F.B.I.;* or John Steinbeck after his *Red Pony;* or a dozen writers who have developed many dozens of themes that ring so true to our readers they buy, on an average, of 1,000 books that range from the simplest Landmark to the subtlest Shakespeare.

And, though no teachers are snooping around with a "Read this. It's good for you," they *are* standing by in the wings for some quite necessary guidance. No matter. Interest will help them o'erleap such barriers.

The fun really starts with the book reports that, in a week or two, begin to be heard and seen in classes throughout the building. Not about "Where's the climax" or "What's the denouement." Our boys just don't care. They know what they love or hate; what gets them mad or sad or glad.

Now that the fair was over, and the appetite whetted, I began to observe, ever so occasionally, especially after lunch, a paperback under the arm of a lad or two where earlier in the day there had been a lunch bag. Boys were beginning to walk off their hero sandwiches with short strolls to the neighborhood Paperback Gallery . . . and sometimes bringing back a sample or two. Soon we discovered the Teen Age Book Club titles caught the fancy of many. We were beginning to establish a rapport between children and books, helping many of our boys buy them cheaply, start their own libraries.

For those who will still not sail to *Treasure Island,* no matter how tempting the call from book fairs and storytellers . . . and libraries . . . and Lively Textbooks, we find still another way—the 21-inch window through which so many of our students view their world. To many school people this window is a one-eyed Cyclops that has mesmerized a nation's youth. Not to us. To us it is an Aladdin's lamp. Touch it and you are transported down to the denizens of the deep, across the surface of the earth, up to where only the astronauts dare. Where or when in all recorded history can horizons be so broadened by so simple an act as a flip of a dial! Where or when in all our teaching experience could so many youngsters, thousands of miles from Broadway, and even more thousands away from the Old Vic, sit in their living room and watch Sir Laurence Olivier in *Richard III,* and then go to their libraries to pick up the play . . . some for the pure pleasure of reading it 'in toto,' and one boy just to relive the full flavor of the one scene he really caught—"You know. . . . Where the poor guy is all alone . . . and he can't escape . . . and he yells 'A horse . . . a horse. My kingdom for a horse.' " We say—*Touch.*

If you watch Leonard Bernstein why not read his *Joy of Music.* If you watch Melville's *Billy Budd,* why not read Jean Gould's *Young Mariner, Melville.* Where do we find these titles? Easy. All the major networks now supply me regularly. The results are happy. Let TV announce a classic, and we quickly stock up in advance for a heavier demand. Let the Kennedys play a game of touch football and still another page in the encyclopedias will become dog-eared by use, as our kids try to learn more of the seemingly strange way their President finds to relax and play. "TV is a tremendous motivational force," Miss Virginia Mathews of the ALA has correctly noted.

I have talked at length about a body of youth that concerns me, as I think it might well concern us all. For, there is a great Cultural Divide that separates it from the Middle - Class - White - Collar - oriented pattern we have designed. It is a Divide through which millions of young people fall as they fail in school. My aim has been to bridge the chasm through the power of positive reading. Only in the faith that there are no "second class" citizens among us—a faith cherished pridefully for nearly two centuries, can we work to advantage with the millions we know as "the disadvantaged."

2. A Different Drummer

M. AGNELLA GUNN

In introducing our discussion about developing lifelong reading habits with teen-agers, I think Thoreau's injunction has special pertinence:

> If a man does not keep pace with his companions, perhaps it is because he hears a different drummer. Let him step to the music which he hears, however measured or far away.

Our teen-agers hear many different drummers and step to vastly different kinds of music. We who would affect their lives need to consider carefully their almost infinite variety. First let me ask you, "What turned you into a reader? What forces, operative when you were a teen-ager, affected your voluntary, independent reading habits? What personal inner drummer are you hearing when you choose what you read today?" An objective look at today's teen-agers in general, and a brief subjective analysis of ourselves as individual teen-agers might be significant and revealing.

I. What is a "teen-ager"?

"He's a person who has left where he was and hasn't arrived where he is going." In this facetious definition lies the serious core of our discussion. If reading is important, or becomes important, to him during this bumpy segment of his life journey, it is likely to remain with him.

What characteristics does he have which are of import to us? In age, he is in the turbulent seven years between thirteen and nineteen. In maturity, he ranges unevenly from an immature child to a responsible young adult. The teen-ager may be just entering the seventh or eighth grade or, if a girl she has a 50-50 chance at 19 of already having been married a year. In number, he is so many and so important that he forms a subculture within our society, a kind of special-interest group like the farm bloc or organized labor. Economically, he is spending enough millions to be the target of specifically designed national advertising. In 1958, 17 million teen-agers spent 9½ billion dollars of their own money—one third of it their own earnings, two thirds of it their allowances. Clothes, food, drink, typewriters are designed for him; magazines are edited for him. In capacity and achievement, in potential and accomplishment, he ranges across the entire spectrum.

Three aspects of his personality pattern are now emerging more strongly and more rapidly: his need for self-realization, for self-assertion, and for self-appraisal. The teen-ager wants to belong, he wants to be popular but the one-sex gang is now becoming "the crowd" and expanding. He continues to be egocentric, but he is developing interest beyond himself and his own welfare and becoming more concerned with people and places remote both in time and in space. He wants to know. He is curious. He wants to increase his knowledge of the world. His interests, broad and intense, albeit relatively short-lived, are usually associated with his strengthening drive toward independence. He is recognizing the values—to him—of accepting his culture's standard of conduct, of having long-term goals, and of making exploratory plans for his life work. In all these displays of expanding interests, he is affected by many factors, including his own mental stature, his sex, and the time at his disposal. He is also significantly affect[illegible]nd this has special import for us—by [illegible] environment: his home, his peer group, and his school.

Most adolescents like to go to movies and to watch TV. But they are tapering off from their sixth-grade peak when they enter junior high school, a shift from about 25 hours a week of viewing to about 15 hours a week by the time they are in high school. Most adolescents also like to read, and many make an important shift to print when they are about twelve.

One of the clearest indications of the teen-ager's growth toward maturity lies in the changes in his concept of self. The fixed childhood concept tends normally to be shaken loose and become disrupted with the spurt of adolescent growth; it remains unstable throughout adolescence, and then reaches a new stability and crystalizes with a more mature, representative self-image. The teen-ager's emotional maturity may be gauged by such qualities as: his self-direction; his human sensitivity; his industry; his willingness to face reality; and his courage to stand for values—for what he believes to be good and right.

The less perceptive and the less psychologically mature, regardless of their age, continue to like life simplified—to see adults in TV or books who are not confusing nor complicated, nor ambivalent. They like obviously plotted narrative and heightened, magnified emotion. The more able and the more sophisticated young viewers, however, are becoming less satisfied with the easy oversimplification of movies and TV and shift to other activities including the reading of somewhat better books, magazines, and newspapers.

This close look at the teen-ager is far from irrelevant, for unless we take these facts of life into consideration and adjust instruction realistically in terms of them, our efforts to modify youngsters' lifetime behavior are almost certain to fail. We need to bring powerful imagination and creativity into play to affect the reading habits of these different individuals who are marching to so many different drummers.

II. What are the bases for developing lifelong reading habits with these different teen-agers?

Two primary factors are operative, I believe.—POWER and INTEREST. They are interrelated but I am separating them here for discussion. Power comes first. In reading no one can have pleasure unless he has power. No power, no fun! But in our dogged emphasis on basic skill-building we may seem to ignore what the skill-building is for. The delight, broadly conceived, which reading power is supposed to insure, often gets short shrift. The first three of the five levels of reading instruction, or rungs up the reading ladder—the period of preparation, of beginning instruction, of rapid progress in fundamental skills—are of obvious importance. But the fourth and fifth levels—wide reading, and refinement of reading tastes—are important too. Yet these may, in effect, be neglected or restricted to the more able pupils in the upper grades. I shall return to these two later. Now I want to pay profound obeisance to the prior claim of power on all five levels and move to the second of the two operative factors—delight, or more restrainedly—*interest* in reading.

Why is the teen-ager interested in reading? Why are you? In preparing for this paper, I made an informal survey in one adult segment of the population, by asking about 50 "readers" this question:

> When you were a teen-ager, what were the influences that turned you into a reader? (Or another way of saying it might be—As a teen-ager what got you permanently "hooked" on books?)

As you would expect the answers differed widely, although certain patterns emerge. These few excerpts are testimony to the varied kinds of personal experiences, influences, and satisfactions which led to permanent interests in reading.

From the first three, we can make some inferences about the significance of environment, and of the effects of adult example, of an early start; of the availability of books, and of self-realization:

> "I had been 'hooked' on books since I was three or four years old. By my teens I couldn't have 'kicked the habit' if I tried."

> "My parents were avid readers. Books were all over the house. I could read whatever I wished. I learned that books satisfied my curiosity on many topics. Books were exciting, and they were tremendous entertainment."

> "I was a young boy on the altar of our church. There was a strange tongue used called 'Latin.' It sounded exciting and even romantic. The parish priest let me borrow some books with pictures and stories in them. They were part of the *Book of Knowledge*. I looked at and soon read every volume in the whole series. This is how it was."

In the next three we can see, in addition to the influences mentioned above, a warning as well as the significance, of satisfaction, of curiosity, of industry, of self-assertion, of self-appraisal, and of emerging self-direction:

> "I probably didn't read too much in the sense of better literature, but our Canadian mining town was unique in that it had a library; I also had a curious and intelligent father (although he had only Grade 3 education) from whom I suppose I accepted the idea that education was something that you had to pursue all your life. Come to think of it, I probably still harbor a vague dislike for the 'better' literature because, in

> our little high school, it was crammed down our throats."
>
> "I disliked farming—appeared to have some imagination—reading was an escape from reality, an introduction to vicarious living!!"
>
> "I was reading at four. By nine, I had read almost all the books in the children's section of the city library. I was sent to the country for six months and forbidden to read. But, during high school, I read two or three books every evening."

In the next unusually perceptive analysis we can see also the fulfillment of basic needs such as the need for belonging, the need of achievement, the need for self-respect.

> "An inspiring seventh-grade teacher of English.
>
> "A realization that family and friends respected 'knowledge and culture' in a child and the need to get that kind of recognition.
>
> "A need to escape everyday frustrations of a lower-class family.
>
> "A dawning realization of the existence of worlds of knowledge and experience heretofore not realized.
>
> "A growing fascination with 'words' and the rhythm of language."

Unless reading becomes both voluntary and independent it is not likely to become permanent. In this next answer we see, however, that it may start quite differently. Here also is a penetrating analysis of a boy's reading for many kinds of escape—escape from thinking, from fear, from possible disappointment.

> "It's hard to be truthful about such a question—because memory has a way of becoming overlaid with wishful thoughts. However, as I think back, I would bring out three outstanding factors that had the influences that you seem to be seeking:
>
> 1. A schooling that literally left time for hardly anything else but reading. I went to school in England, and we had about two or three hours homework every night, after finishing school at 4 P.M. Often I didn't get home until 5 P.M., then there was supper, after which homework took me almost invariably until bed time. This was the pattern for virtually all of my classmates. This reading, it should be stressed, was not done with enjoyment, alacrity, or enthusiasm: it just had to be done. I was not so much 'hooked' on reading as forced into the *habit* of reading.
>
> 2. Probably of greater psychological, although not mechanical, significance was the use of reading as a sop to the conscience. As long as I was reading I was able to persuade myself that I was doing something respectable and 'good.' This was particularly valuable in that reading usually combined the puritan virtue of satisfying the conscience with the hedonistic virtue of avoiding the pain of thinking. As long as one is reading, one can usually avoid the painful possibility of real thought. Thinking and reading are usually *alternatives* at any moment of time.
>
> 3. Reading was a way of avoiding the more risky, and less reliably conquered, challenges of the outside world. Since I was of a rather timid and nonviolent temperament, reading was the best way I could think of to avoid meeting people, to avoid engaging in encounters that I might not enjoy or measure up to, and generally to avoid living on the plane of unpredictability."

These excerpts suggest that reading purposes, satisfactions, and fulfillments are almost myriad. They seem, like love, to grow by what they feed upon. Or like germs, once books get into the bloodstream, they multiply. Extending interests through books is not new, but it is the *sine qua non* of building permanent love of reading.

Some may argue, and cogently, that strengthening fundamental *skill* and developing *interest* define our reading responsibility with teen-agers. I do not agree. Mere skill and interest are not enough. The youngster who becomes a permanent reader beyond the trivial level, is probably held by his growing insights into what good reading is and what it can do. Real power presumes levels four and five—extending and enriching reading interests, and refining reading tastes. Taste and refinement are the "pay off" of previous growth. In a democracy we are not satisfied to develop citizens who read with facility, interest, and almost complete contentment the sport page, the fashion magazine, and the stereotyped thriller. We can do better. America hasn't yet ranked higher than seventh in literacy and in consumption of books. We must do better.

The five levels of instruction mentioned earlier are too often thought of as sequential steps but I believe they involve many abilities which should be developed simultaneously. In other words, attention to taste should begin early not late. It should start as soon as reading itself—as with the kindergartner who said to his teacher, "Oh, that poem's gooder than the last one." Sensing the "gooder" and then later discovering why, or in what way, it is "gooder" is the basis of discrimination. Isn't the essence of taste establishing standards for oneself and becoming increasingly dissatisfied with the second-rate? Isn't it a long time a-growing, and isn't it built on an almost infinite number of independent judgments?

Not every teen-ager will become a devotee of literature either informative or fictional. But regardless of the level on which he reads or the genre in which he finds pleasure, he can be helped to discern differences. For example, he can be helped to see the dissimilarities in the calibre of writing in SPORTS ILLUSTRATED and in the local sports page. He can be helped to gain insight into the static unreality of boys in the series books and contrast them with developing maturity of a boy like Skeeter in James Street's *Goodbye My Lady* as he faces up to the bitter reality of conflicting values and makes his independent decision to return "My Lady."

Insight into the craft of literature, answers to the probing question, "What makes a story good?" can bring immediate and increasing satisfactions. To accomplish this end, both approaches are important: intensive, close guided reading and extensive independent reading.

Taste is and should be a highly personal matter. It seems to mature best under inductive teaching and nondirective guidance.

Learning to discriminate in reading is rather like learning to "see" when you "look" at art; like visiting a gallery with a perceptive guide who helps you see the elements of composition, balance, rhythm, textures, brush strokes that you had looked at but had never really seen before. Gradually, if you developed independence in judgment, you saw similarities and differences yourself, and set up your own criteria for evaluating.

III. What are some practical suggestions for developing lifetime interest in reading?

After urging the importance of knowing the teen-ager and of teaching reading so as to develop his power, interest, and taste, I will close with a mere half dozen suggestions, relying on your creative imagination to dream up your own specific techniques which will work for you.

1. CREATE an environment, physical and psychological, where independent reading is expected and respected; where newspapers, magazines, and books, books, books are available, attractive, abundant.
2. SALVAGE regular school time and space for reading so that it's not news that everyone reads.
3. PROVIDE creative instruction, guidance and freedom for individual exploration.
4. SHOW your own lifelong reading interests, professional and personal, so that you and the pupils know the sources, the indexes, the reviews; develop specialities; probe some area in depth; buy their own paperbacks.
5. INVOLVE other departments in your plans for individual reading; for example, elicit suggestions from the mathematics teacher, or ask approval of your own selected listing in his field.
6. CULTIVATE pupils' individual differences—even their idiosyncrasies.

Lifelong love of reading will come, I believe, when pupils have freedom to listen to their own individual drummers, and are growing in power, interest, and taste as they step to the music which they hear.

3. The School Library and the Reading Teacher

WINIFRED LADLEY

Once upon a time there was a reading teacher who decided to leave this land of 10,600,000 children and young people in public schools where there are no libraries and visit the Land of Lifetime Reading where a dedicated belief that every school needs a library has had an astonishing result: every school has a library! Weary from long years of fighting the reading battle alone, the reading teacher noted with pleasure the dynamic reading programs, functions clarified and responsibilities determined, moving ahead at a lively pace, with teachers in the lead—side by side with librarians enabling students to learn better and teachers to teach more effectively. What did the reading teacher do? She took a job!

Great was her astonishment to discover

that in her new school the school library meant not a roomful of bookshelves and books—was indeed more than a place, more than equipment, more than materials. The term "school library" designated a functional program of "instruction, service, and activity throughout the school"[1]—a program dependent upon a librarian or librarians that had been specifically trained to run a school library; a program that called for a rich supply of library materials of all sorts, housed in attractive, well-equipped, spacious quarters; a program that stemmed from teachers and administrators who believed in the value of library materials and wanted their pupils to use them and who therefore devised schedules of school activities that made their use possible and who had adopted a curriculum that demanded library-enrichment of the classroom activities carrying over into out-of-school reading habits. For was not this the Land of Lifetime Reading?

Cooperative Reading Guidance

On the very first day on the job in her new school the reading teacher decided to try certain features of an individualized reading program. Although she had long believed in certain values of individualized reading with its principles of seeking, self-selection, and pacing, she had never before been able to make the partial adoption she had desired. Always, in this land that prides itself on its progressive education, its prosperity and high standard of living, she had taught in a school that considered a well-staffed, well-equipped, well-supplied school library a luxury item that the school could not afford—as distinct, of course, from band and athletic equipment which were considered basic educational materials. Now, at long last, she could rest her reading program upon the well-stocked library, under the supervision of a librarian trained in reading guidance and possessed of an intimate knowledge of a great variety of well-selected children's reading materials and audio-visual aids. Now the reading teacher could move forward with the librarian, utilizing the librarian's best tool—her personal knowledge of the many desirable methods of teaching reading skills; and the tool they share in common—a knowledge of children.

In the Land of Lifetime Reading, both librarians and teachers are committed to the premise that in order to encourage children to do out-of-school reading they must be provided with satisfying in-school experiences with reading and be given ample opportunity to prime their appreciation pumps by generous allotments of time for browsing, for sampling of books, and even for reading noticeable portions of interesting books during the school day. The reading teacher now had the satisfaction of knowing that the librarian shared with her the responsibility of realizing the potential achievement of each child. And because the reading teacher knows that the interests of a child are not the sole determining factor in his choice of a book that is really right for him, she was delighted to discover here in the Land of Lifetime Reading that the librarian was as conscious as she that a child's choice of the "right book at the right time" depends not only upon a wide variety of books but also upon the way books are introduced and displayed.

The reading teacher was happy to note that the librarian had a broad program of storytelling, reading aloud, book talks presenting many books in capsule summaries, and attractive displays of book jackets, etc., not only in the library but also in corridors and classrooms. Since the school library is an intellectual service station for the purpose of bringing books and children together, reading guidance there involved not only these more traditional approaches to making reading a voluntary activity for boys and girls, but also utilized recordings, television and radio programs, films, exhibits, assembly programs, the theater, spontaneous discussions about books, and other socializing influences—anything to bring children and books together. Whether the children went to the library or the books went to the children was not considered so important. Of importance was it that there be the "right book for the right child at the right time."

The reading teacher soon discovered in her new position that the school librarian gave her every opportunity to explore new books before presentation to pupils—and why should this not be so, since she had had a share in their selection? She was delighted to find that though her school had a central library, generous and fluid classroom collections were maintained at all times and that she, the reading teacher, was not overlooked as a middleman in the distribution of books. Since she knew that her close personal relationship with her pupils often makes her the logical connection in the library-to-child circulation line, she was pleasantly surprised to find completely dead the old idea that all books leaving the school must be checked out over the library circulation desk. Shared also with the librarian and the school library program was the provision of book consultation service to parents. Seldom in the old days in that land of no qualified librarian in 47,000 schools had she had the time or sufficient knowledge of available books for boys and girls to assist parents in acquiring the ability to select books and to help their children interpret, evaluate and use what they read. Now, her close working relationship with the school library enabled her to contribute her part in this much-needed service.

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[1] American Association of School Librarians. *Standards for School Library Programs.* American Library Association, 1960, pp. 14-15.

Provision for Individual Differences

Guidance implies "leading along a path" but unless one knows where he is going he cannot very well lead. Hence, the reading teacher was agreeably surprised to find in her new position a librarian who did know something of where she was going with each child. Impossible as it may seem, the librarian had, with the aid of a simple record system of her own and by making use of reading scores, intelligence quotients, and other pertinent information about the characteristics of each student, acquired some knowledge about every child, much information about a large number, and a great deal about a few. She had identified the brilliant, avid readers—even gathered some of these high-index children into library clubs meeting for book discussions and sharing their enthusiasms with their classmates; she had identified those at the other end of the scale, made a special effort to discover their interests, and found simple reading materials related to those interests. One great advantage the librarian held over the teachers: she had worked with the same children over a period of years. No wonder the reading teacher found the librarian and the library ever-present helps in providing for individual differences!

How stimulating to discover in the librarian a co-learner, one willing to experiment with means of uncovering reading interests, able to supply long "lists of actual titles [as] probably preferable to lists of types of stories in eliciting children's preferences, [but preferring and able to supply] library records of actual withdrawals or a diary of the child's reading [as] probably more accurate reflections of interest if [it is not assumed] that the child has read all of each book."[3] How satisfying to discover in the librarian a willing partner in experimenting with new techniques. How comforting to find in the librarian one who did not demand complete abandon of basal readers but one willing to give aid in planning units of work as enrichment of basal reader materials. And through all these endeavors the reading teacher found that as her reading instruction proceeded in the classroom, the practice of reading was carried on in the library with its vast quantity of well-chosen books, its warm, friendly atmosphere and its absence of grade labels that made it possible for a child to grow in reading ability, beginning where he is today, without fear of embarrassment or hindrance.

Use of Visual and Auditory Aids

Since the school library in the Land of Lifetime Reading was a true materials center, the reading teacher was not surprised to find available a wide variety of audio-visual aids, including more than a dozen reading training machines that could be used in the library by individuals needing drill on specific skills, thus freeing the teacher for more individualized instruction in the classroom.

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[3] Spache, George D. *Toward Better Reading.* Champaign, Ill.: Garrard Publishing Company, 1963, p. 169.

Many films and filmstrips provided common experiences as a basis for reading, and motivated and created interest in recreational reading. Recordings supplied constructive, guided listening; stimulated interest in reading; and provided drill in auditory or phonic skills. Individual headphones were provided, lending themselves to self-directed, small-group work. Tape recorders were in use "in reading instruction for such purposes as providing insight into the student's oral reading, as a diagnostic tool for the teacher and as permanent records of improvement in oral reading."[3]

The reading teacher believed "that the most promising ways to improve reading instruction in the future seem to be to increase the quantity and quality of "programmed" material for developing word recognition skill and the many specialized and subtle types of reading abilities needed at all educational levels; to find ways of making more effective use of such mechanical aids as motion and sound motion pictures, television and new types of "teaching machines" and other electronic devices; to provide means of increasing the insight and skill of teachers; and to make available more time for "individualized instruction."[4] She was therefore extremely pleased to find a school library equipped not only with all such materials but also with self-teaching textbooks such as have been developed by the Center for Programmed Instruction in cooperation with the New York City schools. She knew that these, which could be used in the library, consisted of a series of successive statements, questions, and answers which would reinforce the student's learning, reward his efforts, and free her to give individual attention to those who needed it. Truly a reading teacher's dream was this school library.

In Conclusion

And when the reading teacher discovered that to these many advantages were added well-planned workshops presented by the school librarian to acquaint teachers with all library materials pertinent to their field of work and a well-selected professional library to contribute to the in-service program and foster professional growth, what did she do? She decided to stay! Left behind for us to solve is the many faceted problem of reading instruction and inadequate school library services, continually aggravated by the fact that "we must . . . educate for an unpredictable future; we must educate for flexibility."[5] But we shall adjust to all changes as they come and reach our goal.

4. Bringing Readers and Books Together Successfully Through Storytelling

RICHARD L. DARLING

Storytelling has probably served more purposes than any other art. In primitive times it was the vehicle for preserving history. It was used to teach moral ideas and church doctrine to adults in medieval times. It provided literary experiences for the illiterate masses for thousands of years, and does so in many societies today. During the last century Sunday schools and elementary schools began to take over the art of storytelling. In the Sunday school the storyteller attempted to use his art for teaching moral lessons, while the elementary school teacher too often told stories to teach factual material, in science, for example. In our own time we have seen a great revival of this ancient art. With this revival has come a school of "purism," which has insisted that the story should be told for its own sake, that no more should be expected from storytelling than enjoyment of a good story.

Perhaps this concept is the right one. Certainly this position is attractive to the storyteller who has heard stories destroyed by the attempt to wring from them more than they intend. But it would be a great loss if we ignored the potential of storytelling to introduce children to literature. A time-honored function of storytelling has been to provide literary experiences. In an age when no one could read, the experience had to end there. But for children today, storytelling not only can be a rich experience in itself, but it also may be an effective gate to further delight in books and reading. However, storytelling which introduces children to books, inviting them to read further after the story is finished, should be just as skillful as storytelling intended to be a complete experience in itself. If storytelling is to be worthwhile it must be done well. It is only from good storytelling that a child will turn to books with more stories like the one he has just heard.

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[3] Spache, George D., *op. cit.*, p. 402.

[4] Gates, Arthur I. "Controversies About Teaching Reading," *School and Society*, 90 (November 3, 1962), 372-73.

[5] Dale, Edgar. "Educating for Flexibility," *ALA Bulletin*, 57 (February, 1963), p. 131.

The selection of stories must be made carefully. Few storytellers are comfortable with all types of stories. You must choose stories with which you feel at ease. Perhaps you will be at your best with a humorous story. You may be more comfortable with stories of excitement, and high adventure, with the romance of Greek myth, the wild imagination of an Irish folk tale, or the stately cadences of epic and saga.

Preparation of the story must receive equal care. Study your story carefully, reading and rereading it, until the sequence of events has arranged itself in order in your memory. Then you begin to rebuild the story in your own words, practicing it aloud, and building the story anew. As you gain assurance you are able to perfect your tale, determining appropriate pacing for each section of a story, planning expression and gesture (always underplayed in the storyteller's art) experimenting to determine where a pause will heighten the effect of a story.

The storyteller does not have a big bag of tricks, but those artifices he has must be used well. Storytelling and acting are a world apart. The storyteller has no footlights, no colored spotlights. He does not have the secure protection of a proscenium arch, nor 30 feet between the stage apron and the first row of seats. Acting is for large audiences in vast theaters, where gestures and expression, the voice and the emotions it expresses, must project to the furthest row of the highest balcony. In acting much of the drama of the story depends upon the artifices of the actor. In storytelling, however, the drama must lie in the inherent dramatic power of the story. The storyteller is the vehicle through which the story is expressed, and his presentation should be unobtrusive and subtle and without antics to come between the story and the listener.

By mastering the art of storytelling we can bring to children whole worlds of books that we might not otherwise arouse their interest in. Several helpful books provide suggestions for learning to tell stories: Marie L. Shedlock's *The Art of the Story-Teller* is a fine older book, a classic in the field, which was reissued with a new bibliography by Dover Publications in 1951. Ruth Sawyer's *The Way of the Storyteller*, published by Viking Press is another good book on this subject. It has an especially useful chapter on the use of the voice. *Storytelling* by Ruth Tooze, published by Prentice-Hall, Inc., is a more recent book that has proved to be useful.

Storytelling may be done effectively both in the classroom and in the library. Books should be brought to the classroom, however, so that they can be given to the children immediately after the story while their interest is high. In the library the books will be available. Children should be encouraged to select them for home reading when the story is finished.

Knowing how to tell stories, we are at least halfway toward our goal. The other half of the way must be lined with books. Storytelling, however, is not a *deus ex machina* to lead children to all books. Storytelling has its own appropriate literature and it is with this literature that storytelling can serve as a catalyst.

Since storytelling is a folk art historically and in its simplicity, most storytellers have found folk literature most appropriate for telling. The folk tales, collected first in Europe by the Grimm brothers and others, and increasingly from all countries of the world, provide the basic material for storytellers. Many of the best-known and best-loved of children's stories are a part of this rich heritage. "The Three Billy Goats Gruff," from Norway, "Puss in Boots," from France, "Hansel and Gretel," from Germany, "Tom Tit Tot," from England, "The Tar Baby," from our own South, have been joined in recent years, by "Two of Everything," from China, "Kantchil's Lime Pit," from Indonesia, and the Anansi stories from West Africa, among children's favorites.

Today we have hundreds of excellent collections of folk tales for children to read. Some useful general collections with tales from several countries are May Hill Arbuthnot's *Time for Fairy Tales, Old and New* (Scott, Foresman, 1952), August Baker's *The Talking Tree* (Lippincott, 1955), and Harold Courlander's *Ride With the Sun* (Whittlesey House, 1955), which include stories from each country which was then a member of the United Nations. No brief list could do justice to the wealth of available titles of general collections, nor to the larger number of books of stories from one country. The books on storytelling list useful collections. Others can be found through standard book selection aids. May Hill Arbuthnot's *Children and Books* (Scott, Foresman, 1957) has excellent lists, as well as a useful chapter on storytelling.

By choosing your storytelling selection from books in your school library you can encourage the children to read from the same books independently. No one can say exactly at what age boys and girls will begin reading folk tales, but they enjoy hearing them when they are in kindergarten, and by third or fourth grade they are reading every volume they can find. Elementary school librarians have watched fourth-grade children, after a storytelling session, check out every collection of folk tales the library owned, and then come back the same week looking for more.

The folk tales offer great variety to both the storyteller and to children, but the range of traditional oral literature provides even more. The Greek and Norse myths provide stories full of the romance of noble deeds and heroic figures. Children delight in the imagination that explains the constellations in the heavens, the round of the seasons, or the world's troubles in the form of stories. After hearing the storyteller relate the tale of Ceres and Persephone, or The Death of Baldur, they will read eagerly Sally Benson's *Stories of the Gods and Heroes,* Catherine Sellew's *Adventures With the Gods,* and Dorothy Hosford's *Thunder of the Gods.*

When the storyteller has gained greater confidence, he will want to tell episodes from children's versions of the great Greek epics or the lesser known but equally exciting Norse sagas. From the telling of the story of Ulysses and the Cyclops, both boys and girls, but especially boys, will read eagerly in Church's *The Odyssey of Homer* or Colum's *Adventures of Odysseus and the Tale of Troy,* the stories of the brave deeds and fierce battles on the plains before Troy or of Ulysses' and his men's narrow escape from the monsters, Scylla and Charybdis.

Storytelling can encourage children to read folk literature and the epics that so fully use folk materials. This material has been preserved from an oral tradition. The studied literary work of modern authors, however, should be presented to children in other ways, with book talks, or by reading aloud. Literature that should be presented as the author wrote it should not be included in the repertory.

The only problem may be that the school will not have enough books to fill the demands of the children. If the storyteller is to bring children and books together, he must have a well-stocked elementary school library to provide the volumes of stories boys and girls will demand. The American Association of School Librarians, in its standards for school libraries, recommends a minimum collection of 6,000 to 10,000 books of all kinds for the libraries of schools with 200 to 999 pupils, and ten books per pupil in larger schools. With school libraries that meet these standards, it is possible to provide children with the quantity and variety of collections of folklore for an effective reading program.

5. Bringing Readers and Books Together Successfully . . . Through Paperback Book Clubs and School Book Stores

WILLIAM D. BOUTWELL

For more years than anyone can count, *reading* has been the subject of nationwide hand-wringing, lamentation, and heated debate. I shall give you evidence that reading is not a lost or even a limping cause. I shall supply facts suggesting that reading—especially book reading—is not a victim of television or movies or other mass media. While I shall be dealing chiefly with the ubiquitous paperback, I recognize that the hardcover book marches side by side in the procession. What has happened and is happening almost without public recognition is that book reading and book buying has become a children's crusade. Our children are out ahead of teachers, of parents, of school administrators, and of boards of education. Their membership in book clubs exceeds by millions adult book club membership.

Let me give you some examples.

In a New England city not long ago a parent complained to the superintendent that her child had been asked by a teacher to buy a certain paperback from the rack in the school library. "School books are free aren't they?" argued the parent. The superintendent acted the way administrators are prone to do. He sent out an order forbidding sales of paperbacks from racks in schools and forbidding teachers to permit the collection of money for paperbacks. Perhaps the superintendent didn't know what was going on. In one school alone in this city the children had bought more than 2,000 books through teacher-sponsored book clubs. The superintendent's action curbing acquisition of books produced fast reaction. The children protested. Teachers and principals protested. The PTA got into the act with strong resolutions. Within a short time the superintendent found ways of relaxing his prohibition. Book buying and book reading on a broad scale has been resumed in that city. The children's crusade for reading won the day.

The children's own crusade for reading goes on at all levels and in the home as well as in the school.

We have reports from teachers who tell us that children rescue our club announcements out of waste baskets and ask that they be given the opportunity to acquire paperbacks. I cherish a letter signed by eight sixth-graders in Bloomfield, Conn. Told by their teacher that the school board forbade collection of money for any purpose, they wrote asking whether they could have a book club *outside* the school. The teacher was glad to say yes.

Even the very youngest children are enthusiastic recruits to reading. A Northwestern University professor tells me that one evening he was reading to his daughter Buffie from one of Scholastic's paperbacks for children in the second grade. Suddenly Buffie said, "Daddy, this book is different from the books we have at school. At school we have hardtop books." "How is this different?" asked Buffie's father. "This is a convertible," she said. Then she added, "I like convertibles better."

Recently, when I questioned him on the accuracy of this story he not only assured me that it happened but that Buffie, who is in the first grade, had taught herself to read before formal reading instruction had been launched by the teacher.

Nancy Larrick tells me this story. She and her husband live in a fine old Pennsylvania stone house in Bucks County. Last Halloween she was informed that the Trick or Treaters would come by in the evening. Instead of supplying apples or candy, Miss Larrick decided to lay out review copies of books—hardcover and paperback—which she receives. Evening came and a troop of excited children. They wore grotesque masks and carnival costumes. Once they saw the books they fell on them. The masked revelers sat on the floor, each quietly absorbed in a book, until their impatient mothers rounded them up for the next Trick or Treat visit.

There is a sequel to this story. Next day an anxious mother called and said her child and others were not able to come and could they come tonight. Miss Larrick said, "Yes, of course." Word got around the school and a further visitation took place the third day.

Books are, indeed, treats to children and there is not much trick to getting them to enter the world of books.

In one survey we conducted of children's summertime reading we found that a large proportion of upper elementary-grade children read four books a week and many read more than that. More than a few told us they read four or more books per week in summertime but only two during the school year. That's because of homework, they said. The hunger of our boys and girls for reading matter and their capacity to read is almost limitless.

Why do children eagerly read in paperback the same book they resist in hard cover? Only recently did I receive a clue to the reason. It came from a Catholic educator who specializes in the teaching of reading, Sister Miguel, of Edgewood College, Madison, Wis. She said, "Ease of handling and the bright covers are only two reasons children like paperbacks. The chief reason is that the narrow width of the type page cuts down the eye perception span. It is this factor that enables them to read a paperback edition twice as fast as the same book in hardcover." Then she added, "This is true only when the type and spacing are large."

What about the supply of books to meet the demands of children? In what follows I shall deal largely with that relatively new phenomenon, the paperback.

One measure of the paperback reached my desk two weeks ago. It is the spring edition of *Paperbacks in Print*. The winter edition still looked about the size of a church hymnal. The spring edition appears in a telephone book format. It has 440 pages, approximately almost twice as many pages as the phone directory of Madison, Wis. With this edition the choice of paperbacks available reaches 23,900 titles. As recently as 1950 the number of titles in *Paperbacks in Print* totalled only 6,500. A remarkable growth of more than 300 per cent in 13 years.

Can you see the 23,900 titles in any one place? No, you cannot. Not even in Kroch and Brentano in Chicago can you find *all* paperbacks in print. Other vital paperback statistics are both impressive and unimpressive. In 1962 Americans purchased 275,000,000 paperbacks, five times as many paperbacks as total sales of trade-book hardcovers. The figure seems very large, but actually the increase in the last five years is not large—only about two per cent per year. Many attribute the slow rise to increased prices. As recently as 1956, paperbacks averaged 31 cents; today the average price is 53 cents.

Other facts about the paperback revolution are also sobering. The trade divides paperbacks into "mass" and "quality." "Mass" are the narrow books under $1. "Quality" are wider books and priced over a dollar. The former go into racks in some thousands of supermarkets, candy stores, greeting card stores, drugstores, and newsstands. Both "mass" and "quality" go into stores carrying stocks of a thousand or more titles. There are not many of these, only about 1,000. From these facts you might think it easy to find the paperback of your choice. And yet who has not searched a drugstore rack in vain for the book he wanted? Why isn't it there? There is a reason. Last year the "mass" publishers released 189 new titles per month. To show these titles the average store outlet has only 116 pockets. What happens? A new paperback will be on display for about 15 days. That's what happens unless the book is a best seller. This fruit-fly life span is less than fair to the author, the publisher, and the reader. In this paperback merchandizing "jungle" the books for teen-agers have small chance of survival. They are hard to find. The paperback for special interest audiences—science, education, public affairs and other areas often never get on the racks. Certainly, the search for improved distribution techniques must go on.

What can educators and librarians do with the new paperback resources? I suggest that this depends largely on the image the word "book" evokes in the mind. It is easy to fall into the self-deception that only a price difference and durability separate two editions of the same book, one in hard cover and one in paperback. To understand now the image and function of the *book* in our culture, I invite you to consider what might have happened to that eager reader, Abraham Lincoln, if he had been born into different generations.

Every school child knows how he borrowed books from one of the few citizens of Salem, Ill., who owned any books. Abraham Lincoln was born in 1809. If he had been born in 1859 his parents would have purchased subscription books for the home—the Complete Works of Sir Walter Scott or the Kings and Queens of England. If he had been born 20 years later, Lincoln would have been a regular caller at the New Carnegie library in town and, perhaps, an avid purchaser of dime novels for reading out behind the barn. If he had been born in 1909, he would have grown up reading Tom Swift, and using the new high school library.

If Lincoln had been born in 1929, the

family would have moved two or three times—perhaps to Chicago and then on to California. The family library consisting of hardcover books by Conan Doyle, Hall Caine, and Katherine Anne Porter would be left behind. The young Lincoln would meet more books in school—especially the graded readers.

If Lincoln had been born in 1949, he would now be 14 years of age. As he grew up, he would have seen his parents reading paperbacks, but he would have found none for him until he entered junior high school and joined the Teen Age Book Club. Very early, he would have discovered the children's section of the branch public library, and, if he were very fortunate, his elementary school would have had a library. In the Lincoln home there would be a children's encyclopaedia, bought on time, of course. It is good that he is going to be a big strong fellow, because he must carry around what is literally a heavy burden of school books —as much as 10 to 15 pounds of world history, literature anthology, algebra, and loose-leaf notebook. His English teacher also believes that students should read whole books so he has a few paperback editions which he bought at the new school paperback store. At home, he has a three-foot shelf of paperbacks he has bought largely through the Teen Age Book Club for his own reading pleasure. Where the original Lincoln grew up amid scarcity of books, this mid-twentieth century counterpart grows up amid the greatest abundance of reading matter the world has ever known.

This fantasy may persuade you, if you need persuasion, that the role of the book in any culture requires constant redefinition. The inexpensive paperback for the first time since the days of the dime novel has put book selection and buying within reach of the child with a 50-cent weekly allowance.

Let us consider what the arrival of the paperback has done. It has made the book a partner of motion pictures and television. We publishers find that hit films and hit television create book best sellers. Currently two fine books now in paperback—*To Kill a Mockingbird* and *The Ugly American*—are reaching hundreds of thousands of Americans. It is a case of see the film, then read the book. Often the reader discovers two versions of the story under one title, one on the screen and another between pages. The paperback has also made the book as timely as a magazine. Two paperbacks on Glenn's flight were on the stands two weeks after he landed. Instant book! The paperback has given us portal-to-portal reading—on the way to school, to work, anywhere. The paperback also blots out the tedium and noise of buses, subways, and trains.

To paraphrase Gertrude Stein, we can no longer say "a book is a book is a book." Its function, its relation to our lives, changes with the changing times and with technology and with distribution patterns. With the coming of the handy, inexpensive paperback editions, the book has for the first time in history become almost as much a part of ourselves as a necktie or a necklace.

Should we then in the light of the new role of the book, speak less of a paperback revolution than a revolution in reading? And what meaning will the teacher of reading find in this revolution? What is ahead? What can be ahead, if we use the opportunities wisely?

Let me return for a moment to the children's crusade for reading. The very term recalls a tragic failure of adult guidance in the middle ages. I do not suggest that children left to their own devices with paperbacks will fall into bad habits. Of course this can happen and did happen with the dime novel and the comic book. I do suggest that the teacher of reading can, with thought, guide children's delight in paperbacks into more valuable channels.

Let me suggest some examples. Teachers know the strong motivational pull of paperbacks that match individual interests. Paperbacks—abundant paperbacks—available on school racks, through clubs, and in the library—can vastly extend at little cost the range of subject matter and range of reading ability within the school.

I'd like to take you to Great Neck, Long Island, and to the classroom of David Zamchick. You would see shelves and window sills bulging with paperbacks—more than four hundred. On a file case near the door is a small card file. Any student can borrow any book at any time

—and they do borrow them. All the student does is write the title on a card and chuck it into the little box at the door. Mr. Zamchick's students live in a sea of books and a climate of good book talk and come to love and read books.

I have also been in elementary classrooms where the teacher maintains a window library of paperbacks. They bear the scars and scuffs of hard use. Perhaps this clear evidence that others have read them hard makes them more appealing.

Surveys report that today's teen-ager is affluent. Baby-sitting pays very well. So do odd jobs. Can the school siphon off some of this new wealth into the purchase of reading material? A New York high school English chairman said recently, "I have no hesitation in asking students to buy paperbacks. Even the children from lower economic level families frequently buy a pack of cigarettes a day. If they can afford cigarettes they can afford paperbacks."

We have heard this statement again and again: "The teacher should teach. She should not be a collector of money and a keeper of accounts." What could be more logical? Like all bold brave generalities it deserves closer examination. Let's look at what happens when a teacher sponsors a paperback book club. The class does, indeed, become a club. Usually a little girl good at figures becomes secretary. The children like to run their own book club.

Studies show that the teacher sponsoring a book club spends as little as a half hour to two hours in encouragement of this extra curricular activity. Much of this is classroom discussion of books which itself is educationally stimulating.

How much reading by children can the teacher expect from this expenditure of time? In the upper elementary classroom an Arrow Book Club average order of 35 books produces a minimum of 175 hours of reading by the children. In the junior high school a Teen Age Book Club order will yield 352 hours of reading. In senior high school an average Campus Book Club order will result in at least 360 hours of reading. These figures do not include reading that comes about by trading books which we know to be extensive, so the actual amount of reading resulting from the simple act of permitting a book club to operate is much greater than these impressive figures. All teachers want their students to read more widely. Where can the teacher get more reading mileage from the expenditure of a small amount of time? And yet there are some cities in this nation today where the teacher is forbidden to invest a few hours of time to obtain hundreds of hours of reading. Do these facts suggest that the flat, across-the-board stop orders from the superintendent or the schoolboard that teachers should not be permitted to collect money for anything ought to be re-examined? Money is not a dirty word. It should be used as it is intended, as a rather precise measure for what people want for themselves and from others. Should the term "money" become "don't do this" in education? I doubt that parents and teachers want these blanket prohibitions.

How far have children come in their "crusade" for the right to acquire books of their own choice for their own personal reading? John Ware, educational sales director of Pocket Books, recently said that educational purchases of paperbacks of his own publishing house total annually more than ten million copies. Of the 275,000,000 paperbacks sold annually student purchases—elementary, secondary, and college—are estimated to account for between 15 and 20 per cent.

Membership in children's book clubs of all kinds—hardcover as well as paperback—is in the neighborhood of 7,000,000. My own publishing house, Scholastic, serves over 200,000 book clubs in schools in every state. Similar services are springing up in Canada and in England. Numerous schools—certainly more than 2,000—now enable children to buy selected titles in wire racks or in school stores. The book fair usually sponsored by the PTA has become an accepted feature in many schools.

What may we expect from all this? What may we hope? Will reading become an established way of life for these young people? In the meetings of the IRA Commission on Lifetime Reading chairmanned by Dr. Larrick, we have discussed the question of what makes an adult turn to books. The Gallup poll has offered evidence that half of our American citizens never read a book in a year's time. Is this really true? We don't know.

One study made by W. Virgil Nestrick is illuminating even though it was not directly aimed at reading habits. Dr. Nestrick wanted to find out how and when people — men, specifically — developed their avocational interests in hobbies and leisure activities. He found that 95 per cent of the men who engaged in constructional hobby activities between the ages of six and 18 continued hobbies as adults. Only one third who did not engage in constructional hobbies in their youth took up any hobby as an adult.

Does habit-forming as Dr. Nestrick finds it in constructional activities, operate also in reading? Although we lack firm evidence—at least the Commission has been unable to unearth research evidence —it does seem probable. We do know that children from homes where books are abundant and reading books a common practice are likely to be better readers and are more likely to buy books for their own personal reading. So it would not be surprising to find ultimately that Dr. Nestrick's findings on habit formation *also* apply to books. What tremendous implications this has for the teacher. We will ask ourselves not only, "Are we teaching children to read?" but also "Are we fostering practices that will lead to book reading becoming a continuous practice throughout life?" Does reading become a pleasure in our classes? Do we foster the habit of browsing and of skillful selection of books to match interests? Does the delight of discovering favorite authors take place in your classroom? Do children look forward to book round robin discussions where they trade views on books as they do in some classrooms I know? Do you avoid making book reading a painful experience with ill-considered book reports? One teacher I know reminds student teachers, "Remember, we only have them for four years." What will they be doing during the long years beyond your classroom? This is a question for every teacher. If you believe in the power of teaching you believe that you can affect habits; you can let the children's crusade for reading flower; you can enable them to make books their lifetime friends and counselors.

J. The Use of Multimedia in Teaching Reading

1. The Use of Television in the Teaching of Reading

HAROLD M. NASON

A survey of the British Broadcasting Corporation's regular service of school telecasts published in a recent "BBC London Letter," states:

> School television broadcasting in the last five years has consolidated its position as a broadcasting service parallel to that of sound; as a major factor in visual education; and as a potentially valuable auxiliary in a time of great national need (1).

The report (1) indicates within five years a threefold increase in the number of schools equipped with television receivers, and concludes:

> We do not know yet all that television can do, and it has not yet been brought to more than the fringe of its potential audience (1).

With the value that has always been placed on the personal element and on the tutorial system in British education, one would hardly expect such acceptance of television teaching. Similar evidence from other countries indicates that these are years of great advance for educational television as they are for other technical and mechanical devices that offer new media for teaching. Recognizing these challenging potentials, our Board of Directors set up a special committee to consider the use of multimedia in teaching reading, and organized for this conference a sequence of sessions to deal with use of proved technical devices to improve the teaching of reading.

What is the role of television in the teaching of reading?

If the one is to make a contribution in the other, on two premises all who have to do with educational television programs and all who have to do with school and college reading programs must agree.

First, educational television is an intricate and expensive undertaking; an effective reading program is quite as intricate, and in ways less easily measured, quite as expensive. Those responsible for melding these two complexes must be as selectively cautious and yet as bravely forward-looking, as astutely economical and yet as optimistically spendthrift, and in all as subtle, as the traditional mother of the groom and father of the bride.

Secondly, neither any numbers nor any wonders of new mass media, not even inter-brain communication, will preclude the need for ability to read, will replace the values and satisfactions which reading best can supply. And so, having the responsibility as educators, it becomes our privilege and duty to see that any matching of educational television and teaching of reading be for mutual present and future good.

In more direct terms, I wish to indicate that the role of television must be decided with a basic recognition of the importance of reading and in light of basic principles related to reading skills and values and how they are best promoted. Of these important factors some may easily lose sight in the fascination of the mechanical and technical. Though we may not place ourselves among the unthinking or unwary, we do well to review these basics in simple, straightforward terms.

To say ability to read is becoming less and less essential is to speak without adequate thought. I believe reading grows in importance. In today's complex society every citizen must be able to understand the thoughts, to appreciate the motivation and achievements of others. Again, he must be equipped to comprehend the laws, regulations and directives that determine his duties and responsibilities as a citizen. To achieve these ends, he must be able to read adeptly and with intelligent thoughtfulness.

Every graduate of our schools and colleges should have, then, the ability to comprehend the meaning of words as the writer has shaped from them expression of his knowledge and of himself. No one should be allowed to leave either unable to read well or uninterested in reading habitually.

The responsibility of education goes further to involve development of interpretive reading, of critical thinking. The school is challenged, for example, to prepare every child to be an intelligent reader of the press, able to spot the weaknesses and the strengths in the many articles designed to influence his thinking.

Reading remains and will remain the most important tool subject in the school curriculum.

If we would assure constructive use of television as a medium for teaching reading, to recognition of the importance of skilled, appreciative reading we must add understanding of the specific skills that comprise the reading act and of what developing these skills involves. Lack of simple yet fine definition of terms at the outset may have made some educational television programs in reading much less successful than they might have been.

Many people, among them some teachers, find it difficult to state meaningfully the basic characteristics of good reading and good teaching of reading. The whole complicated, expensive process of using television in any aspect of teaching reading can be wasted if those who create the programs and those who use them in the classroom do not agree, for instance, upon the qualities and abilities of a good silent reader and of a good oral reader, adequately delineated in simple terms of sight vocabulary, word attack, speed and understanding, of diction and phrasing.

The good television teacher of reading with the good classroom teacher must ask —When has a person developed good powers of comprehension, of interpretation, of critical and selective reading? Both must be able to speak of these powers in terms of such specifics as finding the main idea, drawing conclusions, inferences, following directions, making judgments and assessing the truth, the usefulness and the value of what is read.

For the television teacher as for the classroom teacher successful teaching of reading must involve also knowledge of the nature of the child and of the psychology of reading. Above all it calls for a genuine interest in children which inspires a teacher to combine the two harmoniously for the betterment of the child.

Mindful of the many simplicities that constitute the complexity of reading and the art of teaching reading, we must evaluate any new teaching device or technique in terms of this question—When has a person the best opportunity for good educational development? The best result comes when he is engaged in activity directed towards an attainable aim. Involved in something beyond his ability to understand or achieve, he becomes unhappy, inhibited in action. He may develop a complex both disturbing and dangerous. We must know much, then, about the nature and nurture of people, not only how they develop but also how they are affected by what another does to and with them.

Care for the human element by all who teach grows more vital as we enter an age of technology that, within the foreseeable years of many in this room, may produce a rather frightening world of automation.

We need feel no shame that we find it hard to foresee the effect of developing automation upon the processes and products of education. We must, however, not only accept but welcome its certain and increasing participation in educative activity. We must endeavor to be forward-looking pioneers, yet pioneers who carry into new worlds of thinking many proved values and traditions.

Thinking educators recognize the impact and the import of educational television and are giving careful thought to harnessing and directing to educational good this powerful force in our society.

The late Professor Trenaman of Leeds University, Granada Reader in Television, after all his research concluded that the two distinct possibilities for the effective use of educational television are:

> 1. as a coordinator of the numerous visual aids that already exist . . . helping to combine the great variety of aids . . . now being used and . . . to clear up . . . confusion by coordinating them in a sequence.
> 2. . . . most effectively for the in-service training of teachers. (4: p. 42)

The first of these possibilities is being realized in school use of television programs to enrich the experiences good literature brings and to entice both willing and reluctant readers into yet more realms of booklore. So television is being used with already proved success and developing potential in the study of literature, as it is in science, mathematics, art, and social studies.

This success and potential is in keeping with what I believe to be the immediate objective of all television programs, regardless of the subject taught—that is, to convey information, to develop interest, to start discussion, to deepen understanding, and to influence attitudes. I believe that television has possibilities in the teaching of reading skills as well, providing it is handled carefully and providing its use is built thoughtfully into the classroom teacher's program.

Perhaps the one thing television can do best in the teaching of reading skills is to help classroom teachers do a better job. The value of school telecasts in in-service training of teachers, the second possibility for effective use established by Professor Trenarman, has been recognized by many.

Martha A. Gable, director of Radio and Television Education for Philadelphia, reported in a letter to the speaker:

> We are not teaching reading per se as a major television course at the moment. We taught reading a few years ago at the 5th and 6th grade levels. We found it of value to the teachers because of the skill and competence of the television teachers in methodology and content (3).

Carefully planned, skillfully taught television lessons have obvious value to reinforce the teaching of reading skills through the in-service training of teachers that such programs provide.

What of the value of these lessons as an actual part of the reading skills program? Miss Gable's report of the Philadelphia experiment goes on to say, We decided that the individualization necessary in reading placed a major burden on the classroom teacher (3).

John Brook (2), Education Officer with the BBC, has explained that the BBC and ITA in England have hesitated to attempt to teach reading directly by television. They feel the process is too complicated and involves personal relations and development of attitudes and skills beyond the scope of television.

There has been interesting experimentation in direct reading skill teaching by telecourses. The experimenters are well aware of the problems and challenges involved.

Velora Swauger, television reading teacher, WCCC-TV, Hagerstown, Maryland, states:

> Making provision for pupil participation in, and pacing the telecasts for effective participation demands a depth of understanding of children that comes only from experience in the classroom (5).

I think it is safe to say that the more complex the organization of the school and the better the quality of the classroom teacher, the greater the problem is to develop reading skill programs which will meet the needs of both the teacher and the pupils. Quite obviously individual school programs cannot be organized to meet the needs of every student and all local conditions, but an attempt must be made in television teaching as in classroom activities to meet the needs of the majority or the programs will not be of much value.

The St. Petersburg Program

Here are problems of direct concern to the classroom teacher. Many of these difficulties and others can be overcome or prevented when teachers want to use television programs. The success of the whole reading program in which television lessons play a part depends upon wise planning. One of the best examples I have seen was in St. Petersburg, Florida, where the private station at St. Petersburg Junior College was preparing the programs in their studios for transmission over WEDU in Tampa.

Here the television teacher was doing a valuable job because she was doing what the classroom teachers had asked her to do. Her programs to help in the development of specific word attack or comprehension skills were worked out in conferences with the classroom teachers. The teachers knew exactly what to expect and how to fit the TV reading teacher's program into their classroom schedule and in with their classroom procedures.

Mind you, even here with cooperative and efficient planning, there were difficulties. A camera has certain limitations. For example, it is impossible to adjust a television camera to coincide with the eye movements of individual children. Materials cannot be shown on the screen so they can be read exactly as they can in a book. The point was this—the teachers agreed that these difficulties existed, that there were some things the TV reading teacher could not do. She, therefore, confined her activities to the things she could do well. The limitations and the potential of the teacher at a distance were being recognized as well as the limitations and the potential of the medium itself.

So, in the St. Petersburg program, the classroom and television teachers met regularly under the supervision of a competent consultant with access to all the clinical advice and assistance that good teachers need. Here there was true teamwork, not an effort by one individual on the television screen to provide complete reading lessons for children she could not know fully, lessons that could be better done by each classroom teacher, but rather the doing by each member of the team of the parts of the program she was best equipped to do.

Television has proved limits and proved value in many aspects of the teaching of reading. The future of its use in the reading program will depend primarily on how we educate ourselves as teachers regarding its use, how thoroughly and how thoughtfully we profit from the many experiments now in progress.

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5. Swauger, Velora, Television Reading Teacher, WCCC-TV, Hagerstown, Md., in a letter to the writer dated October 25, 1961.

2. The Use of Programed Learning in the Teaching of Reading

EDWARD FRY

Since I am sure that most of you have read at least an introductory article on the subject, if not a book, I shall not take time to tell you what a teaching machine is, or what usually are considered the basic principles of "programed instruction." Instead I shall discuss some of the current trends in the field and some things that might be of particular interest to teachers of reading.

First of all, there are not many programs in the field of reading. While the total number of programs available and under development seems to be increasing at an exponential rate it is still mathematics that is far ahead of all other fields. The range of programs extends from newer mathematics to physiology and from preschool to graduate school. There are programs in music, electronics, and personal emotional problems. It is hard to get a complete list of programs available but the Center for Programed Instruction in New York, in cooperation with the Office of Education, has a very good collection and it's publication *Programs 62* lists quite a few of them and *Programs 63*, which should be available soon, will list a good many more. Slightly older listing of programs, Rigney and Fry's Audio Visual Communications Review Supplement 3, 1961, and Finn and Perrin's Report for the National Education Association project in 1962, also list many programs. None of these published sources has anything purely on reading.

In reading, as of this minute, there is very little available, though many publishers and organizations have plans. At present, most of the major efforts are in developmental or experimental stages. McGraw-Hill has a small beginning reading program. Ginn is developing some programed materials that may be used with their basic reading series and basic texts and workbooks. The Center for Programed Instruction is in the process of developing some remedial reading programs for junior high schools. California Test Bureau is developing some scrambled booklets which key into the California Achievement Test so that after administering the test the teacher will be able to provide some reading instruction in weak areas discovered by the test.

There have been some experimental studies related to beginning reading such as those of Evan Keisler and John McNeil at UCLA, who used a Teaching Machine successfully to teach a small reading vocabulary, but as this experiment required a special machine that would talk (audio output) and also show pictures, its reception was not exactly earthshaking.

There are, however, a number of programs in the area of English Language Teaching such as grammar and vocabulary building. Susan Meyer Markle's vocabulary program entitled *Words* by Science Research Associates, *English 2600* published by Harcourt, Brace & World, and Marvyl Doyle's *Junior High Language Skills* scrambled booklets from California Test Bureau are examples of what are available.

Some users of programed material feel that nearly any use of programed material improves reading skills, as the student must first be able to read accurately in order to respond correctly.

Programing Standards

Let us assume, for a moment, that programs in reading are available as they surely will be in the next few years. How can you as a potential user select good programs? Several major professional organizations are concerned with this problem. Purchasers of any programed instruction materials should be aware of the guidelines set forth by the Joint Committee on Programing Standards. This committee has published materials which offer suggestions for program purchasers.

Here are a few things reading teachers should know about programs:

Readability Formulas

Readability formulas apply to programs just as they do to other types of reading material. Sometimes a publisher will voluntary tell you what the Dale-Chall or

Spache readability level is so you have some idea of its appropriateness for your children. You should request such readability measures. Do not accept some general statement like "this program is good for children from ages six through twelve" that many publishers make. Six through twelve just happens to cover grades one through six and you do not know any more than you did before. I hope that the professional educators will act as a check on material coming into the schools to see that it meets our needs, that it teaches well, and that the taxpayers' money is used efficiently.

Evidence of Learning

There is another healthy trend in programing that applies to all curriculum material and serves as evidence of learning. Some publishers of programs are considering, and including, teachers' manuals which among other things have a good description of exactly where this material has been used, on what type of student, under what conditions, under whose supervision, and, most important of all, how much the students have learned. The exact amount of learning is further specified by giving actual copies of the pre- and post-tests.

Here again watch out for the publishers' loose statement to the effect that "Miss Mathilda Zilch has never seen finer learning in all her twenty years and that both she and the children just loved the program." They sold millions of bottles of "Hadacol" with that type of research until the population, with a little help from the medical profession, found out that it really didn't cure anything. I am not suggesting, I am coming right out and telling you that there are some "Hadacol" type promoters who will be trying to sell you programed materials. It is partly your job to find out who has the penicillin and who has the "Hadacol." And I might even push the analogy even a little further to say that penicillin doesn't cure everything or everybody.

If programed materials work there should be some evidence of it. You, as purchasers, have the right to request that evidence not in the form of Miss Zilch's adjectives, but in the form of "100 students in the Los Angeles City School district in three different seventh grades located in lower middle-class neighborhoods used this material for one half-hour daily during the first seven weeks of the spring semester in 1962 and they made an average gain from 45 per cent to 87 per cent on the attached informal test and a gain of five percentile points on the standardized test."

But even this type of educational research report is not good enough for large scale adoption in your district or county. You should get a few programs and try them out on your students, carefully noting the amount of learning, their attitude, the adequacy of the subject matter, reusability, cost and a number of other factors before you put programed instruction into your school on a large scale.

Evidence of Try-Outs and Revision

One of the ways in which programed instruction material differs from other curriculum materials is the strong emphasis it has on try-out and revision of the material. While it is true that much of our best curriculum materials has had classroom tryouts, most of it has not. Programed material is even more insistent on the necessity of this procedure. Programed material requires frequent responding to small units of subject matter. This is a means whereby the developer can immediately and objectively determine whether the student is understanding it or not.

While evidence for requiring responses during training is not as strong as original pronouncements, the necessity for requiring active recorded responses during program development remains with us. What I am saying is that in some instances research has shown that active responding to a program has not produced more learning than not actively responding to a program or merely reading the program. However, during program development it is important that the students' responses be recorded so that the author can revise unclear parts, sometimes stating the material in another way, sometimes providing for more repetition or examples, sometimes adding pictures or graphs or phonograph records—in short doing anything to insure learning on the part of the student.

Revision to demonstrate learning is all important and while it is hard for the person looking at a published program to make sure that this has been done he can at least ask for some statement, perhaps appearing in a teachers' manual, which states that this has been done, and on what type of student, when, where, and under whose supervision.

There is certainly nothing to stop us from asking for this type of information for all our curriculum materials and I hope that someday we will. But right now, since we are apparently on the threshold of a new type of curriculum material, namely programing, let us be insistent on this and start off on the right foot. This step is requested by the Joint Programing Standards Committee but they do not have the power to make it happen, while you, the purchasers of curriculum material, do.

Variety of Program Forms

I would like to tell you about another type of programing and then go on and give you just a hint of some of the complexities in this learning process we call programed instruction.

There is a scrambled book type of reading comprehension lesson. The student is asked to read a few sentences; then he is asked a multiple choice question about them. He responds to the question by turning to one page if he chooses the first answer, to another page if he chooses the second answer, etc. When he turns to the page indicated alongside his answer choice, he is given information as to "why" his choice was correct or incorrect. Note that if he merely turns to the next page he will be hopelessly lost; he must think which choice to make, not just push along.

There are many variables involved in any learning situation and our particular point of reference in this paper is programed learning. A list of the major headings of some of the variables appears on this page.

A CLASSIFICATION OF VARIABLES INVOLVED IN A PROGRAMED LEARNING SITUATION

Step-Presentation Media (sensory input)
Type of Symbol Used in Steps
Step Characteristics
Mediating Activity (between stimulus and response elements)
Response Mode (form of response)
Response Ideational Content
Knowledge of Results
Reward or Reinforcement Type
Reward Variations
Presentation Rate
Branching Patterns
Branching Control
Repetition or Practice
Discrimination and Generalization
Program Length
Programing Techniques
Subject-Matter Organization
Subject-Matter Characteristics
Coordinate or Supplementary Presentations
Motivational Factors
Environmental Influence
Individual Differences
Measurement of Outcome
Training Efficiency
Quality of Program
Educational Objectives (from Bloom, 1956)

Under each heading there can be many subpoints. If, for example, we change the sensory input from visual to auditory, or we change the type of symbol from a word to a numeral we have completely changed the learner's situation. Or, for example, if we change a class of learners from bright to dull, or the motivation from high to low, or the measurement of learning outcome from recall (essay test) to recognition (multiple choice test) we have again substantially changed the learning situation. What this means is that in reading reports of educational research we might keep some of these factors in mind, and in trying to compare programed learning with traditional instruction we must not forget those factors which can influence the outcome.

Conclusion

We have covered several facets of this intriguing area known as programed instruction. That we haven't mentioned teaching machines very much is symbolic of the current trends in the field. Machines have often not been found to contribute much to learning. The same program given in a book form is about as good as when it is presented in a machine. But we will undoubtedly be hearing more about teaching reading with teaching machines in the future. There will be some published programs on the subject of reading soon. Furthermore, I am fairly certain that thereafter we will have some reports of their use in the schools on a moderately large scale.

3. Use of Instrumentation in the Teaching of Reading

EUGENE EHRLICH

The president of a college near New York City called on me recently to consult with a faculty committee charged with the responsibility of "doing something about the way our engineers read." He opened the conference by stating that the college had allocated $3,000 to getting the project started. He then said, "O.K. Which gadgets do we buy?" My answer was, "Add $7,000 to your fund and buy a teacher."

There is a notion that reading improvement begins and ends with the acquisition and utilization of machines. This notion is widely held not only by the lay public, but also by many teachers. My own feeling, based on my experience in teaching reading to adults and college students, is that machines currently in use can play only a minor role in instruction. I do not mean to oppose entirely the use of machines in the teaching of reading. I do mean to examine the place they should have and put them in that place.

Let me state my attitudes toward the most popular types of machines:

1. *Visual training devices* are useful for students requiring visual training. When used by qualified optometrists, they can produce greater ease in reading. When used to speed reading, they have the advantages and disadvantages of reading films.
2. *Reading films* are useful as goads to higher reading speeds, but must be employed in a setting unlike the typical reading situation. Learning to read in a pattern predetermined by a film-maker cannot be helpful for more than a small number of students who watch a film at any given time.
3. *Accelerators* are useful as goads and have the advantage of being used by one student at a time. They are employed in settings that more nearly approximate the true reading situation.
4. *Tachistoscopes* are toys.

There is one overriding drawback to all these instruments: they do not help students improve reading comprehension. A teacher using only a reading manual, books, and some mimeographed material can do a great deal toward helping to build comprehension. He can also do at least as well as the machines in building speed.

In a significant number of cases, however, students who fail to increase their reading speed despite all the blandishments of a teacher do succeed with the help of machines. This is the primary reason for not abandoning machines entirely.

There are two more reasons for retaining them. One is that good reading teachers are hard to find. The other is that one day, as the electronics art advances and we become more knowledgeable in learning theory, someone will come up with an outstanding, useful machine—the machine of my dreams.

That machine is capable of supplying students with an enormous variety of reading matter in any length desired. It is completely flexible so that a teacher can help all his students in all areas in which they need help. It is inexpensive. (Up until now, the machine I am describing is a paperback book.) But I want more. The machine recognizes students' needs immediately and then meets them. It learns through experience and can be used with every student in very large classes. It is expensive, but the expense can be justified because the machine handles so many students at once. (Now you see that the machine I dream of is a paperback library coupled with an expert teacher.) This machine enables the teacher to deal effectively with many times the number of students teachers now can help in a course.

Reading machines were first introduced early in our century, but came into wide use at about the same time that reading improvement began to emerge as one of the post-World War II fads in the United States. Undoubtedly, they helped popularize the field of reading, particularly adult reading improvement. For this we owe machines a great deal. Their novelty and inherent appeal for the lay public made reading improvement an intriguing game, with considerable benefit for the players.

But we who teach reading have paid dearly for the contribution of instrumentation. Not only has the teaching of reading come to be identified almost exclusively with increasing reading speed, but the availability of machines has led to a proliferation of special schools fully equipped with impressive gadgetry and too often managed by the borderline practitioner. This latter concern of mine is a subject for another time, perhaps for another place. It is the proper identification of reading improvement as a great deal more than speeded reading that I address myself to now.

Foundations of the Reading Program

Reading instruction properly concerns itself first with building comprehension. In the years I have taught reading, I have found that the great majority of students who enroll in my courses think that they already read with adequate comprehension. Yet it soon turns out that they comprehend inadequately.

How inadequately they comprehend may be seen in part from their scores on standardized reading tests, but the most revealing displays of inadequacy come in class exercises when they cannot give the gist of a paragraph or two of college-level reading material after they have read it through once or even twice. The techniques used by Ruth Strang in the Examiner's Reading Diagnostic Record (Teachers College Bureau of Publications) remain the most revealing test of reading comprehension. To this day, I use her testing technique in modified form in every session of every course I give. After all, if a student cannot tell what a paragraph says immediately after reading it, how can we say that he has read it?

- I know of no machine that tests in Strang's way.

What does the teacher do when he discovers that a student has not understood a paragraph he has read? He goes back over it with the student, showing him its structure, discussing the meanings of the individual words, calling out the key elements in the development of the paragraph, identifying the signals and the important qualifiers and the semantic subtleties. All these things and more must be done.

- I know of no machine that can do all these things.

When the student is ready to try his skill again on a new paragraph, the process is repeated. And it is repeated once more or ten times more until the student finally grasps the technique. When this has been accomplished, the teacher moves on to consider larger units of writing until, after some months, chapters of books and entire books can be read and comprehended by the student.

- I know of no machine that does this.

Reading instruction properly concerns itself with building love of reading. Most students who come to my courses in reading improvement—and I speak only of them—report that they have not "read any good books lately." They have read only the textbooks and other assigned books they must read. A few report occasional reading of novels and certain popular magazines. Yet this kind of reading has so little in common with the kinds of mature reading skills required by their college courses that these students have difficulty in meeting college standards. The habit of reading widely and frequently—love of reading—seldom produces candidates for remedial or developmental reading programs.

I love to think that love of reading can be imparted by demonstration. I have seen some signs that it can be. In my courses, I try to keep my students informed concerning my own current reading. I suggest books for them that I think they will like. I ask about those books in succeeding class sessions and give students a chance to "show and tell." My manner in all these discussions is one of interest and shared pleasure. Teachers can surely do much to encourage wide reading.

- But can machines do so?

Reading instruction properly concerns itself with efficient use of reading time. Undoubtedly students should learn how to complete a reading assignment as quickly as they can, but there is more to this problem than merely moving the eyeballs rapidly. Study after study shows improvement in reading speed no matter what technique is employed. Machine-oriented courses do well, and courses that do not use machines also do well.

Why we do not always read as fast as we are able can be traced to laziness, habit, lack of confidence or desire, and the like. Maybe we just enjoy some reading too much to want to read fast. There are books we cannot wait to finish, but there are others we want never to end. Yet if students are going to be able to read all the books they must read, they must be able to read at a reasonable rate.

Part of the solution for them is to learn how to use a book. They must become familiar with all the guides arranged for them by author, editor, and publisher. In demonstrations of so-called reading at fantastically high speeds, it must be noted that a period of this kind of prereading always precedes the actual performance. A highly useful technique. Another part of the solution is mastery of an efficient learning procedure, such as that described by Francis P. Robinson (*Effective Study*, Harper) and so widely copied. Surely a third part of the solution is to try to become habituated to reading speeds greater than those usually practiced.

- The machines I know concentrate exclusively on that third part of the solution.

The number of hours of instruction normally assigned to a reading improvement program may be as few as ten, as many as 30 or 40. The student does not have enough time in class to become fully habituated to high reading speeds. So he must spend many hours away from class, practicing to make those speeds so natural that he can go into high gear whenever he wants. This practice is normally accomplished without the aid of accelerators, films, or any other instrumentation. If, then, the burden of the major effort at habituation is on student practice without instrumentation, would it not seem that there is little need for the machine in the first place? The teacher explains the psychology of reading, administers periodic checks of reading speed with appropriate tests of comprehension, and does the prodding that the machine might perform.

What Is the Place of Machines?

There are two excellent ways to use reading machines. One is as experimental devices in the study of how we read. Coupled with close observation by the researcher and subjective reports from students, machines undoubtedly can play an important role in answering important questions. And the machines discussed up until now in this paper are only first steps toward the machines that eventually will be used in research. Elaborate devices encompassing instruments like the electroencephalograph, the motion picture camera, and tape recorders will feed data into electronic computers in the laboratory of tomorrow.

Another way to use machines is as adjuncts to instruction. In order to expand a teacher's usefulness by enabling him to deal with more students than he now can handle, our present reading machines can be put to good use. Surely students find them a pleasant diversion for a time. Care must be taken, of course, to see that students have adequate time for building comprehension skills. In the complete absence of a teacher, as in correspondence reading courses, the machine plays its role in prodding the reader, while the printed page plays the role of teacher.

In summary, it would seem that programs in which students spend most of their time on instrumented practice hope only for gains in speed. Programs that effectively utilize a skilled teacher can go well beyond these modest goals to develop broader and more important skills. Which goals do you want your students to achieve?

K. Reading and Linguistics

1. Concern for Research on Linguistics and Reading

RUTH G. STRICKLAND

With the expansion of individual and national interest until it spans the globe and includes people who use a vast variety of languages and dialects, Americans are becoming very conscious of the place of language in the interrelationships of men and nations. There is no way to predict how many of the generation of children now in school will need to learn languages that are little known by our citizens in order to do the work they want to do in the world. Not only the Peace Corps, CARE, and other philanthropic enterprises but government, business and industry also need language-trained emissaries to send into many parts of the world. The more all teachers know about language and how it is learned the better prepared children can become for the new role in world affairs which they may be called upon to play.

The sensible point at which to start any study of language is one's own language. For elementary school teachers and children this is not only the medium of daily operation but also a basic segment of curriculum. Children need to improve their control over their own language and also to learn as much as possible about language itself—what it is, how it operates, why there are many languages in the world, and how languages grow and change. National organizations and individual teachers are more and more turning their thoughts in this direction and seeking ways to do better the things we have always done in school and add the new responsibilities of our times.

What children do with their language in the elementary school years and what they can learn to do with it should be of prime concern to all who are interested in education. Yet for many years we have given little attention to how children use their language and even less attention to the relationship of their use of language and the ease with which they learn to read and write. Studies of children's language made more than 30 years ago are still referred to in discussing the way children use language though the contacts with language have expanded enormously through the years as the result of many influences, particularly the mass media.

The need for bringing up to date the available knowledge about children's language has resulted in two major studies of the use of language by children of varying ethnic and cultural backgrounds and in two separated geographic areas. One of these studies is being conducted by Walter Loban of the University of California at Berkeley and the other is our own study at Indiana University. Loban is approaching the completion of a 13-year longitudinal study of the oral language of approximately 200 children whose speech he has recorded each year beginning when the children were in kindergarten. They are now nearly all at the tenth-grade level and he will follow them for two more years. Ours is a horizontal study of nearly 600 children, 100 at each grade level from Grade 1 through Grade 6. Both of these studies have utilized a scheme of analysis devised with the help of a group of linguists.

A Study of Children's Language

The Indiana University study was designed to analyze the structure of children's language in the first through the sixth grades, to compare it with the structure of the language in the books in which children are taught to read; and to ascertain, at the sixth-grade level, the influence of any apparent differences on the quality of children's reading skill. We were interested in discovering the patterns of syntactic structure used by children in their informal talk and in describing the patterns of subordination and elaboration characteristic of their speech. We wanted to ascertain the extent to which the patterns of structure found in the children's language were related to the variables of age, sex, and intelligence of the children and the socio-economic background and education of their parents. A major hypothesis of the investigation was that a study of children's speech might offer suggestions for the construction of better material in reading textbooks. A second hypothesis was that the quality of a child's oral reading interpretation and his silent reading comprehension are related to the quality of his oral language.

This was a loosely structured study which involved recording the spoken language of children in the first through the sixth grades in its spontaneous form in free interaction with children and adults, analyzing the language for the types and frequency of occurrence of syntactic structures and analyzing further the amount and kinds of subordination and elaboration which appeared in the utterances. The findings were compared to determine relationship to personal and social variables. Lastly, representative textbook series were searched to ascertain the point at which patterns that were used freely by children began to appear in the readers and the occurrence of these patterns. At the sixth-grade level, the quality of the children's spoken language was compared with the quality of their silent reading comprehension, their oral reading interpretation, and their listening comprehension.

The 575 children in the study were selected by random sampling from the public schools of the Metropolitan School District of Bloomington, Ind. The schools ranged in size from two-room rural schools to fairly large city schools and covered the ethnic and socio-economic range of this mid-country university community.

Following intelligence testing and the obtaining of data from parents and from school records, the children were brought from the classroom to a convenient recording room in groups of two or three. The children were stimulated to talk about themselves, their families, pets, or whatever was of interest at the moment. The recording was continued until each child was talking easily and naturally. The recordings were transcribed by typists and checked for accuracy by the researchers who listened to the tapes as many times as were necessary to divide the material into phonological units based on the children's use of pauses, falling intonation, and meaning.

Twenty-five consecutive phonological units were analyzed for each child and divided into fixed slots and movables. Certain elements in the sentence or phonological units were analyzed on a second level to determine the types of subordination elements which children used as fillers for stationary and movable parts of their sentences. Short utterances were deleted as were elements designated as mazes which were actually sounds or words used to help the speaker get started, hold his listener's attention, or change the direction of his sentence, such as, "Well," "uh, er," "I guess, I guess" or "No, I mean," and the like which are used by speakers of all ages.

Analysis of this large quantity of children's speech appears to warrant several generalizations. Children of all grade levels used a wide range of language patterns and certain of these patterns which recurred with great frequency can be considered the basic building blocks of their language. The children combined these patterns with other less frequently used patterns in a variety of ways. Children at all grade levels could expand and elaborate their sentences through the use of elements of subordination and movables of time, place, manner, and cause. The fillers children employed in filling the slots and movables in their sentences varied considerably though there were no outstanding differences in the fillers used by children of different ages. Significant differences were revealed between the patterns used by children and their intelligence, mental age, occupational status and parental education.

Four sets of widely used reading textbooks were examined to discover which of the language patterns used most frequently by children appeared in a selected sample of reader pages. The sample included the whole of all preprimers and pages from the beginning, middle, and end of all other readers. While this comparison did not produce conclusive evidence, certain points did stand out. The basic subject, verb, object pattern was the only pattern to appear in the samples of practically all of the books. The patterns differed from book to book within the series as well as from series to series. Patterns of sentence structure appeared to be introduced at random in a haphazard manner. There was no follow-up of a pattern once it was introduced. There appeared to be no scheme for the development of control over sentence structure which paralleled the generally accepted scheme for the development of control over vocabulary.

The process of reading is a process of turning the stimulus of written words back into speech. Words alone do not carry the meaning; it is created by the arrangement of words into patterns. It is quite possible that the teaching of reading could be greatly improved by attention to the relationship between speech and reading.

To learn something of this relationship, comparison was made at the sixth-grade level of the quality of children's speech with their oral reading interpretation, their silent reading and their listening comprehension.[1] It was found that children who ranked high on these variables used more of the common structural patterns of the language than did children who ranked low on these variables. Obviously, much more study is needed in this realm.

Linguistics and Reading

Linguists are becoming interested in the problems of the elementary school. A conference of nationally recognized linguistic scholars held on the Indiana University campus in January dealt entirely with the problems of teaching children symbol-sound correspondence in the beginning stage of learning to read. The attention that is being directed to the new book by Charles C. Fries[2] is evidence of the widening interest of both linguists and teachers in what linguistics may offer to the teaching of reading. Interest in the 43 Letter Initial Teaching Alphabet devised by Sir James Pitman and John Downing of England is further evidence.

A conference held in May under the auspices of the Modern Language Association of America gave attention to the problem mentioned in the first paragraph of this report. There is great need today for teaching children in the basic schools as much as possible about the nature of language and how to learn it because many of them will be called upon in later years to learn a language quickly in order to work in other parts of the world. Basic linguistic principles can be taught incidentally but systematically if teachers understand language and the history of the development of their own language. This is a frontier which is challenging for all teachers and children.

An outgrowth of our three-year study of children's language was the conviction that the field of linguistics has much to offer for the improvement of the teaching of all aspects of language. During this year, our attention has been centered on a study of the writing of linguists to cull from the mass of available material any ideas, principles, or techniques which could be used or adapted to improve the teaching of reading, spelling, grammar, and composition in the elementary school. The more we have studied the more convinced we have become of two points: first, there is much in the linguists' study of English and other languages which we can use, and second, these ideas must be adapted to the elementary school.

The field of language learning cries for further research of many sorts. The teaching of reading is in special need of fresh thinking and all of the help that scholars in English, linguistics, and psychology can offer.

2. English Primers Around the World

ROBERT L. ALLEN

The topic on which I was originally asked to speak—that of "Pre-Primers Around the World"—is at once too narrow and too broad. I shall limit myself, therefore, primarily to a discussion of primers for teaching *English*, both as a native language and as a second language.

The majority of such primers that I have examined can be divided roughly into two groups, which reflect by and large the two schools of thought that seem so often to be pitted against each other on the pages of journals like *The Reading Teacher*. Some primers follow the lead of Lawrence Faucett's *Oxford English Course*,[1] in which little attention is paid to individual letters or to their sounds, but in which a carefully controlled vocabulary is introduced a few words at a time, often with accompanying pictures. Students using such primers are evidently expected to learn to recognize each word as a whole rather than as a sequence of symbols representing different sounds.

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[1] Eldonna L. Evertts, *An Investigation of the Structure of Children's Oral Language Compared with Silent Reading, Oral Reading, and Listening Comprehension* (Sixth Grade). Doctoral Dissertation, Indiana University, 1961.

[2] Charles C. Fries, *Linguistics and Reading*. New York: Holt, Rinehart and Winston, Inc., 1963.

Michael West's *New Method Readers*[2] also make use of a carefully controlled vocabulary introduced a few words at a time, but included in his series is a so-called "Green Primer" intended for children who do not know the English alphabet. No lesson in the Primer introduces more than two or three new letters, with words that can be spelled by means of the letters already taught. But some of West's lessons would seem to be more confusing than helpful: in Lesson 7, for instance, he introduces the letter *o* for the first time—and immediately brings in such different pronunciations of the *o* as are to be found in words like *not* and *note*, and also the use of final *o* as in *no*.

Some primers published abroad, however, concentrate on at least a few regular spellings before they introduce irregularly spelled words. H. Martin's *New Study Readers*,[3] for example, begin with a primer that presents the following words in Lesson 1, each accompanied by a picture: *a cat, a rat, a bat, a hat*. Lesson 2 introduces *a hen, a pen, a bell, a well;* Lesson 3, *an ox, a box, a fox, a dog;* Lesson 4, *a cup, a pup, a boy a toy*.

Other Beginners' Books

At the opposite extreme from the primers that I have been describing are beginners' books based on the so-called "oral approach." Since these are intended for use with classes in which all new material is presented orally first, little attention if any is given to a gradual presentation of English sounds or to an ordered presentation of regular spellings. In Part One of Unit One of the *Fries American English Series*,[4] for example, one finds, on the same page, the spelling *-oo-* in both *good* and *afternoon*, the spelling *-ou-* in both *you* and *your*, the final *-o* in both *do* and *Chicago*, the spelling *a*-consonant-*e* in both *name* and *are*.

But, strictly speaking, Book I of the *Fries American English Series* should not be called a "primer" since it does not purport to be a book for teaching reading. Other beginners' books based on the belief held by many linguists that the *real* language is the *spoken* language, go even further in trying to avoid the teaching of reading: in several of the books in Holt's *Spoken Language Series*, for instance, the written forms of the language being taught are not introduced at all; instead, the pronunciation of each sentence is suggested by a phonemic transcription.[5]

Admittedly, teaching a person to read a second language is a very different matter from teaching a child to read for the first time. And yet more and more in recent years, my wife and I have been asking ourselves whether some of the principles which linguists like Leonard Bloomfield and Charles C. Fries have advocated for the teaching of reading to English-speaking children might not be applied with great benefit to the teaching of English as a second language; and conversely, the presence in our family of a child now in kindergarten has led us to wonder whether some of the lessons we ourselves have learned from teaching English to students in other countries might not be turned to advantage in helping our son to move from mere "readiness" to real "reading."

In English-teaching materials which we prepared in Indonesia in 1958,[6] we tried to approximate the phonemic principle of one-symbol-per-sound—not by using an artificial phonemic transcription, but rather by using regularly spelled English words. With only a very few exceptions, irregular (or even regular but less common) spellings were not introduced until after all the English sounds had been presented with their most common spellings, and had been practiced orally. In this we hewed close to principles laid down by Leonard Bloomfield for teaching reading to English-speaking children. Furthermore, even in the case of the few exceptions, no irregular spelling of a given sound was ever introduced until after that sound had first been presented with its regular spelling. Following the lead of Michael West (but using a key of our own devising), we represented each vowel sound with a number, which we taught when we first introduced the vowel sound—and which we then wrote under the vowel letters of irregularly spelled words to indicate their pronunciation. Although the first few lessons in our text were exceedingly hard to write, we felt that the results more than justified the effort.

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[1] Lawrence Faucett, *The Oxford English Course*. London: Oxford University Press. (Date of original edition unknown.)

[2] Michael West, *The New Method Readers*. London: Longmans, Green & Co., 1927.

[3] H. Martin, *New Study Readers*. Bombay: K. & J. Cooper, "reprinted" 1952.

[4] Pauline M. Rojas and Staff. *Fries American English Series for the Study of English as a Second Language*. Boston: D. C. Heath and Company, 1952.

[5] See, for example, William S. Cornyn, *Spoken Burmese* (New York: Henry Holt and Company, 1945).

[6] Robert L. Allen and Virginia F. Allen, *Graded English for Caltex Employees*. Rumbai, Indonesia: The Caltex Pacific Oil Company, 1958. (Mimeographed.)

Picture Alphabets

Another experiment of ours which has colored our view as to the best approach to the teaching of reading took place in Burma in 1953-54. Feeling frustrated by the fact that even after several weeks of studying Cornyn's *Spoken Burmese*, I was still unable to read a single Burmese sign on the streets of Mandalay, I taught myself to read Burmese with the aid of a primer intended for Burmese school children. I then decided to share the fruits of my own learning with my wife, but—in order to make her learning of the Burmese letters less arduous—I borrowed an idea from Frank C. Laubach: I made up a picture alphabet with pictures of objects whose names began with the different letters of the Burmese alphabet and whose shapes suggested the shapes of the corresponding letters.[7]

Laubach had already made up a set of pictures for the Burmese letters, but in several cases the distinguishing features of one letter as opposed to another did not appear to be an integral part of the accompanying picture. I felt that my alphabet might be more helpful as a tool for teaching young children than Laubach's had been: a teacher does not have to call attention to the difference between a *c* opening downward and a *c* opening to the right if the opening in each case is an integral part of the corresponding picture. An experiment carried out with a group of Burmese kindergarten children seemed to support my contention.

I have described both our Indonesian materials and our Burmese alphabet since the method that my wife and I have been using in teaching our own son to read derives from both. I have made up picture alphabets for both the capital letters and the small letters of English; with their aid, my son was able to learn the sounds of all the letters, both capital and small, in only three or four ten-minute sessions. In two or three more such sessions I was able to teach him numbers for all the vowel sounds, so that he can now produce any vowel sound if I say its number; but more than this, if I write down any consonant letter—say, for example, the letter *b*—and then call out a number, he can pronounce the syllable consisting of the *b* sound followed by the vowel sound I have indicated.

There is also a rhyming game at which he is very adept. I have prepared several sets of cards on each of which I have written a regularly spelled, one-syllable word, of the kind that one finds in Parts I and II of Bloomfield and Barnhart's *Let's Read*.[8] These cards are grouped into sets of words such that all of the words in any one set rhyme with each other (and, of course, end in the same two or three letters). I first show my son a card bearing a word or a meaningless syllable that rhymes with all the others in its set but which begins with the vowel letter instead of with a consonant (as, for example, the meaningless syllable *-ap*); after the child has named several words that he can think of himself which rhyme with the syllable I have shown him, I start turning over the cards in the set one at a time. He "wins" each card that he can read off before the next card is turned up.

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[7] See, for example, Frank C. Laubach, *Teaching the World to Read* (New York: Friendship Press, 1947), and also the workbook by Paul McKee and M. Lucile Harrison entitled *Learning Better Sounds* (Boston: Houghton Mifflin, 1957).

[8] Leonard Bloomfield and Clarence L. Barnhart, *Let's Read: A Linguistic Approach*. Detroit: Wayne State University Press, 1961.

A New Kind of Primer

But the activities that I have described so far are merely games, not real reading. I must confess here that my son is not really eager to learn to read. He loves to be read *to*—and he has sensed the fact that learning to read by himself is going to be a slow and laborious process.

We have tried him out on one or two readers of the kind that are used in many first grades. He was attracted by the colorful pictures at first; but he quickly learned that such readers almost never tell exciting stories.

We have also tried him on sentences likes those to be found in Bloomfield and Barnhart's *Let's Read*—sentences of the *Pam had a tan bag* type. I must admit that he finds such sentences just as dull as those in the first-grade readers (and furthermore, there are no pictures in *Let's Read*). The only printed book which he has shown any interest in trying to read by himself so far is the Sullivan Associates' excellent *Programmed Reading Book 1.*[9]

But *Programmed Reading Book 1* does not tell a story. Something still different seems to be needed for children with interests like our son's, and at his stage of reading readiness. Such children need to discover that words which they can read themselves (and without too much effort) can add significantly to the plot of an interesting story. With this goal in mind, my wife and I have hit upon the scheme of telling (or of reading) a story in which short, important messages turn up at spaced intervals. These messages are crucially important to the plot—but they are also expressed in words which (with the exception of the articles) are all spelled regularly. Needless to say, the child being read to is supposed to read these messages aloud himself; they do not slow the story down too much since between each such message and the next there is more reading (or storytelling) by the adult. But as the story progresses, the sentences to be read by the child appear more frequently.

We have already written up one such "primer."[10] In this primer we have tried to bring together ideas for the teaching of reading that we have gleaned from primers of different kinds, printed in different countries around the world.

3. Linguistics and the Teaching of Reading

CARL A. LEFEVRE

At this 1963 annual convention of the International Reading Association, the linguistic sequence generally placed insistent emphasis on single sounds and single words, and on how they are spelled, as the fundamental problems of primary reading instruction. To reading specialists this means look-say and phonics, or a combination of look-say and phonics; to linguists this seems to mean phonemics, morphophonemics, and spelling patterns. This insistence appeared in different ways in the presentations of Dr. H. L. Smith and Dr. Stratemeyer, and also in the presentations of our British colleagues, Mr. Downing and Mr. Pitman. Dr. Fries gave us an excellent scholarly and historical survey of the handling of reading problems for the past century and a half, then turned to current problems.

The "linguistic" emphasis throughout was thus narrowed to the alphabetical principle, insisted upon by Dr. Smith, and the spelling-pattern principle of Dr. Fries; both positions are neo-Bloomfieldian (*Let's Read*: *A Linguistic Approach*). It was Dr. Emmett Betts, a reading specialist, who said something to the effect that linguistics has much more to offer reading teachers than phonemics, the alphabetical principle, and spelling patterns. I agree. If we are to do a better job of teaching primary children how to get meaning from the printed page, we must far transcend the single-sound and the single-word attack (the single letter or grapheme, and the English spelling pattern).

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[9] Sullivan Associates. *Programed Reading Book 1.* New York: McGraw-Hill Book Company, 1963.

[10] Readers interested in obtaining copies of this primer should address the writer in care of the Department of English and Foreign Languages, Teachers College, Columbia University, New York 27, N. Y.

My emphasis, stated oversimply, is on a new whole-sentence method of teaching reading. In its entirety this method includes elements of modern scientific knowledge (1) of intonation, (2) of sentence patterns. (3) of structure words, and (4) of grammatical inflections and other word-form changes—these four taken as the main signaling devices or systems of American English. To my way of thinking, these four interlinked devices subsume phonemics—and should in primary reading instruction. Spelling and high-frequency spelling patterns might be learned sequentially, through a gradual inductive process, but largely in learning to write (rather than read) graphic counterparts of the child's larger and more communicative speech patterns. This position is set forth systematically in my forthcoming book, *Linguistics and the Teaching of Reading*, scheduled for publication by McGraw-Hill in January, 1964.

The best way to get meaning from the printed page, if indeed not the only way, is to read entire meaning-bearing sentence patterns. In any simple sentence, many significant elements can be analyzed. *Apples grow on trees*. For example, there is normal word order, there are structure words (or function words), there are grammatical inflections (in addition to spelling). This sentence was chosen to illustrate the kind of language children can use in experience charts, when they are introduced to capital letters to begin sentences, and to periods and other marks of end punctuation; when they are introduced, above all, to the sense of the running line of print as a carrier of entire meaning-bearing language patterns in graphic form.

I am talking about the normal child, the physically, mentally, emotionally normal child who does not have a problem of hearing or vision, who has not had a nervous breakdown and is not about to, whose parents have not had, nor are threatening to have, nervous breakdowns. I realize I'm narrowing this group of children, but I do not intend to deal with clinical aspects; I do want to deal with learning to read as a language-related process for the normal child.

Now if the child reads as many children do—and some of these children are 20 years old and attend college—if they read word by word, in our language they cannot help reading each word as though it were a complete utterance: the voice must fade and fall on every single word. They read: WE / HAVE / AN / APPLE / TREE / . That's exaggerated, but if the reading is something like that, then it really doesn't matter whether you have a horizontal print, a vertical list of words, or whether the print goes off into orbit at some crazy angle. The running line of print, and *the sense of the running line of print*, call for the reading of the whole pattern as a whole pattern; it is only that whole pattern that communicates meaning. A related fault that some students have is reading by pattern-fragments rather than literally word by word. They read something like: OUR / APPLE / TREE WILL / BEAR / FRUIT THIS / FALL / . Again there is no sense of the language pattern, no sense of the running line of print. The best way to develop this sense of pattern in primary reading instruction is to teach, deliberately and consciously, the association of sentence intonation patterns with printed sentence patterns.

What we all want the child and every other reader to do is to take in an entire pattern that bears meaning. At the very start of reading instruction, it is desirable to use language children themselves use when they develop experience charts with a teacher. In my treatment of sentence order (syntax), I have decided to use four patterns. Nobody knows how many sentence patterns there may be in our language; the potential number of different sentences approaches infinity. Professor Zellig Harris believes there is one kernel pattern: N V — N for noun, V for verb. These N and V symbols do not necessarily mean single words. These functions, as I call them (sometimes they're called positions, but I prefer functions), these N and V functions may be filled by single words, or by almost any other construction in the language. It's really quite amazing when you stop to look for the sort of substitutions we commonly use in those functions. If N V is the original kernel sentence, then every other sentence is to be regarded as an expansion, or a transformation, or an inversion of N V. This is a beautifully logical explanation. However, we do find certain other patterns that are very common and that we're all familiar with; these are included under the other three in my presentation, briefly summarized below.

The N V N is the most common sentence by all counts in the language. This is a subject-verb-object sentence—N V N: *Man bites dog*. It is Pattern 2 in my system, N V being Pattern 1. Pattern 3 is N V N N. The N V N N could be N^1 V N^2 N^3; that is, showing the function order by raised numerals. This pattern accounts for all direct objects, indirect objects, object complements and all those compound pattern-completing constructions. These are commonly used. Everybody who knows a little traditional grammar knows them. Since the pupils use them commonly, it's helpful to use these patterns. Pattern four is the linking verb sentence: N Lv, but usually N Lv N, N Lv A, or even occasionally, N Lv Ad. These sentences are very close to mathematical equations in which some form of the verb *be* represents the equal sign; or another linking verb may be used, such as *seem, appear, taste, smell*. In addition to these four important sentence patterns and their common expansions, I also introduce pattern inversions and passive transformations in an effort to include the main high-frequency patterns within a simplified presentation of what is, after all, a complex subject: English syntax.

Time and space do not allow a more complete explanation here of the new whole-sentence method of reading instruction I am proposing. I must add, however, that the three hundred or so structure words should be taught sequentially in the elementary grades, beginning with the first preprimer, and continuing as long as need be. The most important are: (1) noun markers such as *the, an, two;* (2) verb markers such as *is, had, will, did;* (3) phrase markers such as *in, of, about, under;* (4) clause markers such as *while, because, if, since;* (5) connectors, such as *and, but, for, or;* and (6) question markers such as *who, why, when, where*. A few smaller and less important classes of structure words can probably be taught by an inductive method while the main classes are being taught more systematically.

The fourth signaling system, or signaling device, is word-form changes, including grammatical inflections and the derivational prefixes and suffixes English uses to alter meanings, or to change the structure and meaning of words of one form-class to another. Grammatical inflections include noun plurals and genitives, the parts of verbs, the forms of adjective comparison (*-er, -est*), and even the flighty and unreliable *-ly* that converts some adjectives to adverbs, but also marks a number of adjectives (*manly, lovely, sickly,* etc.). Derivational affixes include all those prefixes and suffixes that alter meanings, or convert words of one form-class to membership in another (*back, backward; peace, peaceable; angel, angelic; turn, return; view, preview;* etc.). The almost inexhaustible prefixes and suffixes should be taught sequentially, but for primary reading instruction they are probably less important than the grammatical inflections.

Incidentally, I would like to state my own personal position in the interdisciplinary field of linguistics and reading. I am not a card-carrying linguist. I have noted a few gentle hints, in print and elsewhere, that not all linguists consider me a card-carrying linguist either.

Just one example. On the same platform with me at a similar convention in another city, a finger-wagging linguist cautioned reading teachers to beware the nameless pseudo-linguist, pushing panaceas of all kinds, guaranteed to cure overnight every reading disability from cretinism to *tic douloureux*. In his sect, only those tillers who have harvested long compilations of terms used "in the field," are admitted to have any worthwhile knowledge of American English. Moreover, the supplicant must further qualify by winnowing his lexical items according to phonemic and semantic variations; then he pinpoints them one by one on his maps. Unless the novice has proved his vocation by such creative endeavors, he cannot hope to achieve any degree of linguistic acceptance. The test of orthodoxy in this sect is thus quite clear.

Preparation of linguistic atlases is a useful and necessary task, but a scholar need not participate in order to understand and appreciate; nor does linguistic geography comprehend all of linguistics. Literary critics write criticism without first compiling the bibliographies they use at their discretion. Medical men do not compound their own drugs.

I am profoundly interested in language and in studying language; I have been deeply involved in that study ever since I did my first graduate work in phonetics at the University of Michigan in the 1930's; ever since I first studied the great Sapir, and read Bloomfield's *Language* when it was a new book. I am therefore deeply interested in linguistics, if you define linguistics as the modern way of studying language. I have learned as much as I could from C. C. Fries and from Bloch, Trager, and Smith, to mention only the most important of the linguists whose works I have studied; I have also read many of the texts in applied English linguistics that are based on the groundbreaking work done by these men. I am not a novice in linguistics, nor am I a member or a candidate for membership in any linguistic sect; moreover, I can claim to have done my homework in reading and teaching the language arts.

I would describe myself as a humanist and a scholar-teacher of liberal arts persuasion; but also as a teacher of teachers—both pre-service and in-service. I place myself on the side of the pupils, and on the side of their teachers; in so doing I appeal to the idealism and devotion I find in teachers, and to their concern with their results in attempting to teach the skills of literacy, reading and writing.

L. International Aspects of Reading

1. Experiments with Pitman's Initial Teaching Alphabet in British Schools*

JOHN A. DOWNING

Sir James Pitman[1] designed the Initial Teaching Alphabet (also known as the "augmented Roman alphabet") as a more simple and more reliable alphabet for learning to read. His intention is that young beginners should use this until they have become confident and fluent in reading books printed in i|t|a, and that they then should transfer their skill and confidence to reading books printed in the traditional alphabet and spelling of English.

In planning our research into Pitman's i|t|a it seemed to us that we must seek evidence on two essential questions:

1. Is the traditional alphabet and spelling of English an important cause of failure in beginning reading?[2]
2. Can children transfer their reading skill from a simplified beginner's system to the conventional one, and if so, is the *final quality* of the reading *in the traditional alphabet and spelling* significantly superior to that obtained without the intervention of a special beginning reading alphabet?

The i|t|a Experiment in Beginning Reading Classes

To answer those two basic questions we have established an experimental group of classes using i|t|a for their first instruction in reading and writing, and we are comparing their progress with that of control classes learning to read in the conventional way. Because the basic issues are related to the alphabet and spelling of English, we have attempted to cancel out all the other factors which have been shown to affect children's success and failure in learning to read. For example, the teachers in both the experimental and control classes have been asked not to change their usual methods of teaching but to continue to use their normal instructional procedures. Also, the program of reading primers is the same in both groups, except for the essential difference that the experimental classes have theirs printed in i|t|a while the control classes use the same books in conventional print. Similarly, the control classes' libraries of conventionally printed books are paralleled in the experimental classes by a good selection of library books in i|t|a.[3]

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*Copyright 1963, Initial Teaching Alphabet Publications, Inc.

[1] I. J. Pitman, "Learning to Read: An Experiment." A paper to the Royal Society of Arts, November 23, 1960. (*R.S.A. Journal*, February, 1961, pp. 109, 149-180.)

[2] J. A. Downing, "The Relationship Between Reading Attainment and the Inconsistency of English Spelling at the Infants' School Stage," *British Journal of Educational Psychology*, 1962, pp. 32, 166-177.

We have taken special precautions against the so-called "Hawthorne Effect" —the motivation which is said to be produced in human subjects by the knowledge that their work or other behavior is being studied in research. The workshops, research meetings, and school visits necessary for the experimental classes testing i|t|a are matched by similar activities for the control classes.

In such ways, as well as with the careful matching of experimental and control classes, we are attempting to provide a reliable basis for obtaining objective data to answer those two important questions about the alphabet and spelling for beginning reading.

Results up to March 31, 1963

Only the data on that part of the sample which began the experiment in September, 1961, can be reported at this time. Therefore it should be recognized that for this interim analysis,[4] although there appear to be no consistent differences in the composition of the experimental and control groups[5] which could account for the results we are about to report, comparisons have to be made between experimental and control schools which are not matched to the standards of precision which we have set ourselves in the complete project.

Provided that these limitations are borne in mind we may now take a cautious look at the way the answers to our two main questions seem to be coming out.

Is the traditional alphabet and spelling of English an important cause of failure in beginning reading?

Today, five items of evidence can be presented on this question;

1. Progress through the reading program: Figure 1 shows clearly how much more rapid the progress through the reading program is when it is printed in i|t|a. If these results are confirmed by our later analyses of the records from the total sample, it will be clear that *children*

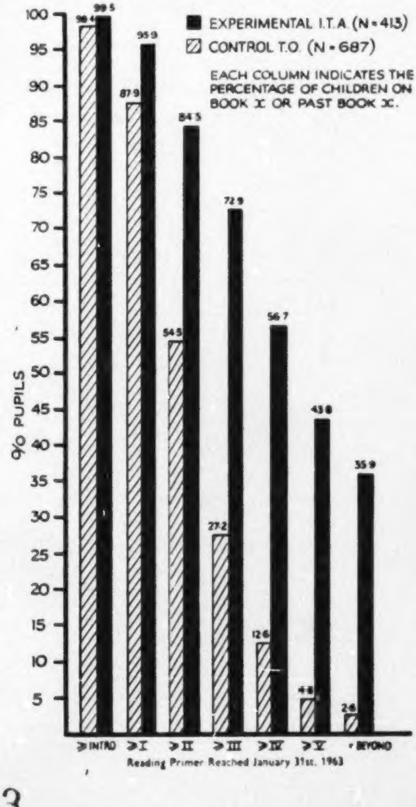

FIGURE 1. Reading Primer Reached in the Middle of the Second School Year, January 31st, 1963. Control and Experimental (I.T.A.) Groups

(All pupils commenced school in September, 1961)

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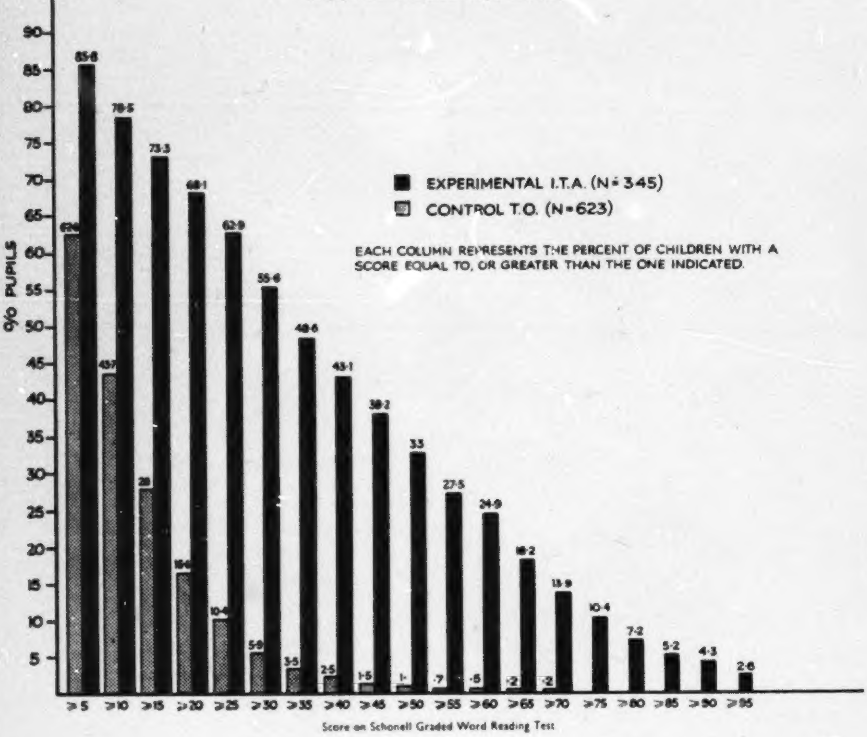
[3] Approximately 200 titles have been printed in i|t|a, and publishers are producing still more, taking advantage of the freedom of copyright, which has been made available by Pitman to all who adopt unchanged the designs of the i|t|a characters and of the spelling with it.

[4] The Reading Research Unit of the University of London Institute of Education gratefully acknowledges financial assistance from the Educational Records Bureau and the Grant Foundation which makes possible the presentation of this paper.

[5] A statistical description of the two groups is included in the unabridged version of this paper published by the Unversity of London Institute of Education.

FIGURE 2. Reading Attainment in Control and I.T.A. Groups, February, 1963
(All pupils commenced school in September, 196.)



can learn to read much more rapidly when their beginning books are printed in Pitman's i|t|a, and hence the use of the traditional alphabet and spelling for beginning reading does seriously retard children's progress into the world of books.

2. The recognition of words in print: In February, 1963, the standard version of Schonell's Graded Word Reading Test* in the traditional alphabet and spelling was administered to the control group while the experimental group took the same test transliterated into i|t|a. All conditions were held constant (e.g., size of print, test environment, etc.) apart from this single factor of the alphabet and spelling.

The results of these tests are given in Figure 2. They confirm those from the records of the children's progress through the primers of the reading program. At the end of one and a half school years the scores of the i|t|a group were very much higher than those of the control group. Figure 2 shows that this pattern holds throughout the various levels of scoring on the Schonell test, and that the superiority of the i|t|a groups represents a very significant difference from the attainments of the control pupils.

If the results of subsequent tests of the remainder of the sample confirm those presented above, we can be certain that *children can recognize very many more words in print when they are presented in Pitman's i|t|a,* and we may then conclude that the traditional alphabet and spelling do seriously frustrate children's attempts to translate those printed symbols into their own English language.

At this point we may pause to ask *how is it possible that this new alphabet can produce such great superiority in the scores of the i|t|a pupils?* What exactly

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*F. Schonell, *Psychology and Teaching of Reading.* Edinburgh: Oliver & Boyd, 1949.

TABLE 1

THE INITIAL TEACHING ALPHABET

Number	*Character*	*Name*	*Example*	*Traditional spelling*
1	æ	ae	ræt	rate
2	b	bee	big	big
3	c	kee	cat	cat
4	d	dee	dog	dog
5	ϵϵ	ee	mϵϵt	meet
6	f	ef	fill	fill
7	g	gae	gun	gun
8	h	hae	hat	hat
9	ie	ie	tie	tie
10	j	jae	jelly	jelly
11	k	kae	kit	kit
12	l	el	lamp	lamp
13	m	em	man	man
14	n	en	net	net
15	œ	oe	tœ	toe
16	p	pee	pig	pig
17	r	rae	run	run
18	s	ess	sad	sad
19	t	tee	tap	tap
20	ue	ue	due	due
21	v	vee	van	van
22	w	wae	will	will
23	y	i-ae	yell	yell
24	z	zed or zee	fizz	fizz
25	ƨ	zess	houƨeƨ	houses
26	wh	whae	when	when
27	ȼh	chae	ȼhick	chick
28	ŧh	ith	ŧhaut	thought
29	ɟh	thee	ɟhe	the
30	ʃh	ish	ʃhip	ship
31	ʒ	zhee	meʒuer	measure
32	ŋ	ing	siŋ	sing
33	ɑ	ah	fɑr	far
34	au	au	autum	autumn
35	a	at	appl	apple
36	e	et	egg	egg
37	i	it	dip	dip
38	o	ot	hot	hot
39	u	ut	ugly	ugly
40	ω	oot	bωk	book
41	ꝏ	oo	mꝏn	moon
42	ou	ow	bou	bough
43	oi	oi	toi	toy

TABLE 2

Traditional Orthography	*Pitman's Initial Teaching Alphabet*
beg	beg
beg	beg
Beg	beg
Beg	beg
BEG	beg

TABLE 3

Traditional Orthography		*Pitman's Initial Teaching Alphabet*	
1. u	ruby (and in RUBY)	1. ꝏ	rꝏby
2. u..e	rule		rꝏl
3. U..E	RULE		rꝏl
4. o	do (and in DO)		dꝏ
5. o..e	move		mꝏv
6. O..E	MOVE		mꝏv
7. ui	fruit (and in FRUIT)		frꝏt
8. ui..e	bruise		brꝏz
9. UI..E	BRUISE		brꝏz
10. ou	group (and in GROUP)		grꝏp
11. ou..e	route		rꝏt
12. OU..E	ROUTE		rꝏt
13. ough	through		thrꝏ
14. OUGH	THROUGH		thrꝏ
15. oo	moon (and in MOON)		mꝏn
16. ooe	wooed		wꝏd
17. OOE	WOOED		wꝏd
18. oo..e	ooze		ꝏz
19. OO..E	OOZE		ꝏz
20. heu	rheumatism		rꝏmatizm
21. HEU	RHEUMATISM		rꝏmatizm
22. ue	flue		flꝏ
23. UE	FLUE		flꝏ
24. eu	maneuver		manꝏver
25. EU	MANEUVER		manꝏver
26. ew	grew		grꝏ
27. EW	GREW		grꝏ
28. oe	canoe		canꝏ
29. OE	CANOE		canꝏ
30. wo	two (and in TWO)		tꝏ
TOTAL 30		*TOTAL* 1	

are the simplifications and systematizations of i|t|a which caused 56 per cent of the i|t|a group as compared with 6 per cent of the control group to reach the score of 30-plus on the Schonell test after only one and a half years of schooling?

Briefly,[7] the young beginner's initial burden of learning is greatly lightened in i|t|a: the ambiguity of conventional spelling is drastically reduced, and i|t|a's coding of the basic sound units of English is much less complex.

The young beginner's initial burden of learning is reduced in three ways through i|t|a:

i. Fewer Characters.

Table 1 shows the i|t|a has 43 characters which is, in fact, fewer than the number children have to learn if they are to cope with conventionally printed books. i|t|a has only one[8] form for each character, not two or more as in the traditional alphabet (e.g., b only instead of B and b; e only instead of E and e; ɡ only instead of G, g and ɡ, etc.).

ii. Fewer Whole Word Representations

Each whole word in i|t|a has one single visual form as compared with an average of three alternatives for each word in conventional print. See, for example, how i|t|a reduces five alternative forms to only one (Table 2).

iii. Fewer Phonic Symbols in i|t|a

In i|t|a the beginner has to learn less than 50 elementary phonic facts as a foundation for word-building, as compared with some hundreds of alternatives in conventional lower-case print alone and over 2,000 if conventional capitals and script characters are taken into account. Table 3 gives an example of how this great reduction in the beginner's burden of learning is achieved in i|t|a. The sound common to words like *two, zoo, flew, shoe* has at least 18 different lower-case spellings plus 12 upper-case alternatives in conventional print. In i|t|a these 30 or more alternatives are reduced to one single printed symbol for this one single basic unit of sound.

In these three ways i|t|a greatly lightens the burden of learning which the beginner must bear before finding the key to interesting and pleasurable reading. This reduction in alternatives, of course, brings with it a much greater frequency of repetition of the items to be learned in the i|t|a system. It also reduces the risk that pupils may become confused by the variety of different ways of signalling the same sound or word.

In i|t|a, children are not faced with the kind of ambiguity produced by the erratic use of the letter *o* in words such as those shown in Table 4. In the i|t|a version of these words the letter *o* is used only once because the sound it represents occurs only once. Where *other sounds* occur they are appropriately signaled by *other letters.*

Another type of ambiguity is also removed in i|t|a. In conventional English spelling, the basic left-to-right rule of reading is broken in words like *mine.* In i|t|a this left-to-right rule is never broken. Table 6 shows how i|t|a removes the ambiguity of reading directions of conventional print.

In i|t|a phonic symbols are less complex. Children do not have to learn that the *c* in *cat* and the *h* in *hat* represent quite a different sound at the beginning of *chat* just because in traditional print there is no letter for that different sound. In i|t|a, that different sound is provided with its own different letter. Other sounds which have no letter of their own have been provided with their own particular letters in i|t|a. They are learned as individual letters in their own right, representing their own special sounds. (Further examples are given in Table 5.)

When we realize how much more simple and how much more reliable i|t|a is, then the fact that 56 per cent of the beginning readers can read in i|t|a what only 6 per cent can read in the traditional alphabet and spelling no longer seems incredible.

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[7] A full exposition of the features of i|t|a has been given by the writer elsewhere: J. A. Downing, tω bee *or not to be: The Augmented Roman Alphabet.* New York: Pitman, 1962.

[8] Capitalization is achieved by making a larger version of the *same lower-case shape* — lower-case because the ascenders and descenders are thought to provide maximum visual discrimination and because they occur very much more frequently than upper-case letters in traditionally printed books which beginners, using i|t|a, may see incidentally and to which they later transfer their reading skill.

TABLE 4

Traditional Orthography	Pitman's Initial Teaching Alphabet
move	mꝏv
cove	cœv
gone	gon
one	wun
women	wimen

TABLE 5

Traditional Orthography	Pitman's Initial Teaching Alphabet
cat	cat
hat	hat
chat	ʧat
which	whiʧ
thigh	ʈhie
thy	ɟhie

TABLE 6

Traditional Orthography	Pitman's Initial Teaching Alphabet
mine	mien
bone	bœn
lane	læn
tune	tuen

3. Accurate recognition of continuous passages of printed English: The Neale[*] Analysis of Reading Ability, a comprehensive reading test consisting of six passages of English narrative prose, has been used to determine the experimental and control pupils' *accuracy* in reading *continuous* English.

The control pupils were given the standard edition of Form C, while the experimental group took the identical test except for its being transliterated into i|t|a. The tests were conducted on a subsample consisting of pupils in seven well-matched pairs of experimental and control schools. All the children were halfway through their second year at school when tested in February, 1963.

The Neale reading accuracy measure provided results which confirm those from the Schonell tests. Figure 3 clearly indicates the superiority of the i|t|a pupils. If the results of subsequent tests of extensions of this subsample parallel these, we may conclude that *children can accurately read continuous English prose much more readily if it is printed in Pitman's i|t|a*, and hence that the conventional English alphabet and spelling do seriously frustrate beginners' attempts to read narrative passages accurately.

4. Comprehension: *But do the i|t|a*

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[*] M. D. Neale, *Neale Analysis of Reading Ability*. London: Macmillan & Co., Ltd., 1963.

children comprehend the additional words and sentences these tests show they can "read"?

The Neale Analysis measure of comprehension consists of forty-four questions about the meaning of the six test passages. Figure 4 shows that the i|t|a group's comprehension scores are *significantly superior* to those of the control group. If these findings are confirmed by our future studies of the extension of this subsample, we may conclude that *i|t|a significantly closes the gap between children's listening comprehension and their reading comprehension.* This evidence that i|t|a gives children greater freedom to understand continuous English in print supports the view that the conventional alphabet and spelling of English represent a serious barrier to young beginners' comprehension in reading narrative prose. It seems that young English-speaking children are being deprived of enjoyment and interest in reading books because many words well within their listening comprehension are locked away from them in reading by the difficulties of the conventional alphabet and spelling.

5. Speed of Reading: The Neale tests were timed in accordance with the procedure laid down by their author, with the results shown in Figure 5. The i|t|a children read significantly faster than the control children. If extensions of this testing to a wider sample produce similar results it will be clear that *young children can read faster when their books are printed in i|t|a.* Hence we shall be able to conclude that the difficulties of the conventional English alphabet and spelling cause young beginners to slow down their rate of reading. To judge the importance of this finding, it should be related to the more limited span of attention and perseverance of such very young pupils.

Summing up this preliminary evidence on the first question, we have the following tentative findings. If i|t|a is used, then:

- Young children get through their beginning reading program faster.
- They can recognize more words in print.
- They can accurately read continuous English prose more readily.
- They can comprehend more continuous English in print.
- They can read faster.

The conventional alphabet and spelling of English in control classes have been shown to:

- delay progress in the reading program
- frustrate the recognition of words in print
- impede the development of skill in reading continuous English prose
- cut children off from words within their range of comprehension
- reduce their speed of reading

The impediment caused by the conventional alphabet and spelling appears to go beyond erecting barriers to success in these various aspects of reading. Head teachers[10] of the experimental schools have reported that i|t|a not only accelerates progress and raises reading standards but it also brings with it certain other advantages:

- It raises the young beginner's level of self-confidence.
- It increases enthusiasm for reading and interest in books.
- It allows children to be more independent in their work.
- It results in a marked improvement in creative writing.

The influence of the alphabet and spelling at the beginning reading stage thus seems to be very wide. If these interim findings are found to apply to the wider sample we are investigating, it may not be unreasonable to conclude that the use of the conventional alphabet and spelling for reading and writing at the beginning stage so seriously overloads the young child that not only does he fail to achieve as well as he might in these subjects, but also his appreciation of and his own creativity in written English lose much of the joy they might otherwise hold for him.

Can children transfer their reading skill from i|t|a to the traditional alphabet and spelling, and if so, are their attain-

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[10] A fuller report is given in: J. A. Downing. *Experiments with an Augmented Alphabet for Beginning Readers in British Schools.* New York: Educational Records Bureau, 1962.

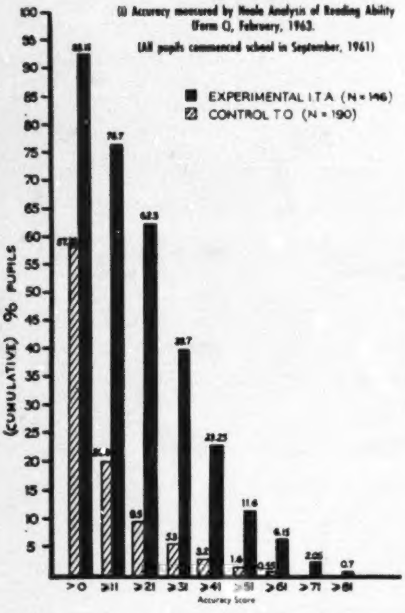


FIGURE 3. Reading Attainment in Selected Schools
(i) Accuracy measured by Neale Analysis of Reading Ability (Form C), February, 1963.
(All pupils commenced school in September, 1961)

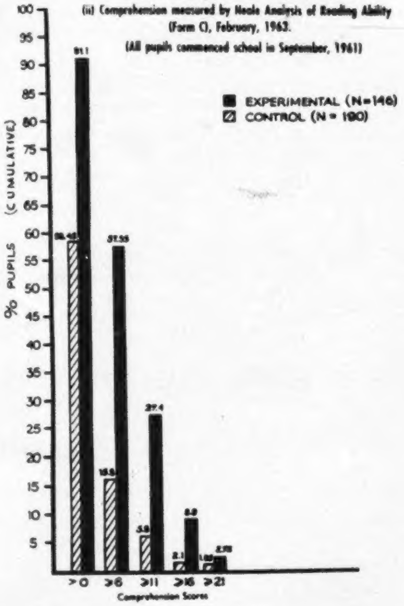


FIGURE 4. Reading Attainment in Selected Schools
(ii) Comprehension measured by Neale Analysis of Reading Ability (Form C), February, 1963.
(All pupils commenced school in September, 1961)

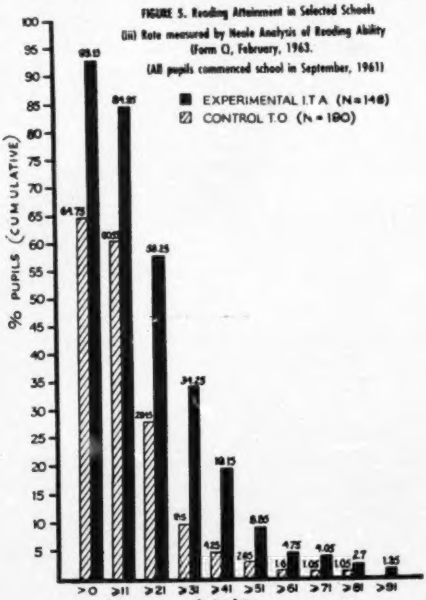


FIGURE 5. Reading Attainment in Selected Schools
(iii) Rate measured by Neale Analysis of Reading Ability (Form C), February, 1963.
(All pupils commenced school in September, 1961)

ments superior to what they would have been without the early period on i|t|a?

This is the second basic question our research is designed to answer. Pitman's theory is that this transfer of skill will be made easier by his careful preservation in i|t|a of the main cues used in fluent reading of traditional print. Figure 6 shows a continuous passage printed in i|t|a. It demonstrates the high degree of compatibility between i|t|a and traditional print achieved through Pitman's design. There are some words in i|t|a (e.g. cof) which are quite unlike their conventional form, but Pitman claims that children will correctly guess such words from their context.

Pitman's view that the transfer from i|t|a to conventional print will take place easily because of his preservation of the main cues for fluent reading in most words and through contextual cues in the remainder indicates that the optimum time for transfer will be when such skills have had time to develop in reading i|t|a. For this reason the teachers in the i|t|a classes have postponed the transfer stage until the individual pupil has demonstrated his readiness for it by rapid fluent reading at the primer 2 ii level.

Pitman believes that the end result *after transfer* from i|t|a will be higher standards of reading in conventional print throughout the school population. It is clearly too early to test this adequately after less than two years, but we have recently tested *all* the experimental i|t|a pupils in seven classes on their ability to read *the conventional alphabet and spelling,* although not more than 40 per cent of them had been taken off i|t|a books by their teachers at this time.

In March, 1963, the same subsample which had taken Form C of the Neale Analysis the previous month were retested on Form A, but this time both experimental and control classes were tested *in the conventional alphabet and spelling.*

The results are presented in Figures 7 (Accuracy), 8 (Comprehension), and 9 (Speed).

The most important fact which emerges from these tests is that the i|t|a group achieved significantly higher scores for accuracy and comprehension in reading *the conventional alphabet and spelling.*

This significant superiority of the i|t|a group in accuracy and comprehension when reading conventional print is in spite of the fact that more than half of the i|t|a pupils had not yet been transferred to conventional books by their teachers. Even at this early stage the children who began with i|t|a can transfer their reading skill to conventional print so effectively that they can read the latter with much greater accuracy and comprehension than the control group pupils, who have been learning the conventional alphabet and spelling from the beginning.

These results seem to indicate that children can transfer their reading skill from i|t|a to the traditional alphabet and spelling so successfully that their attainments *in reading conventional print* are superior (*at this stage*) to what they would have been without the early period on the i|t|a. However, this finding must be regarded as only tentative at this point

Figure **6**

ʈhis iz printed in an augmented rœman alfabet, ʈhe purpos ov whiȼh iz not, az miet bɛɛ suppœzd, tω reform ωur spelliŋ, but tω imprωv ʈhe lerniŋ ov rɛɛdiŋ. it iz intended ʈhat when ʈhe beginner haz aȼhɛɛvd ʈhe iniʃhial sucsess ov flωensy in ʈhis speʃhially ɛɛzy form, hiz fuetuer progress ʃhωd bɛɛ confiend tω rɛɛdiŋ in ʈhe prezent alfabets and spelliŋz ov ʈhem œnly.

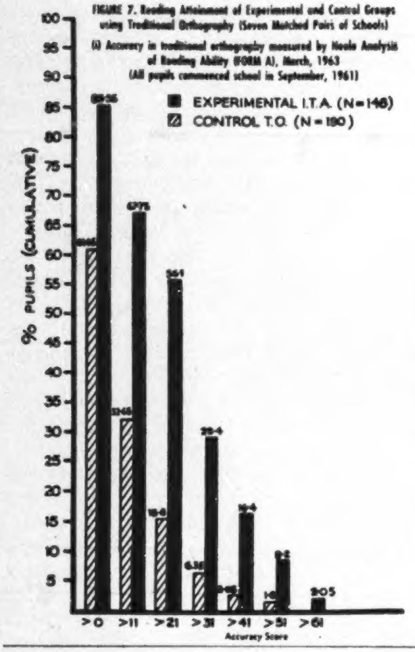


FIGURE 7. Reading Attainment of Experimental and Control Groups using Traditional Orthography (Seven Matched Pairs of Schools)

(i) Accuracy in traditional orthography measured by Neale Analysis of Reading Ability (FORM A), March, 1963
(All pupils commenced school in September, 1961)

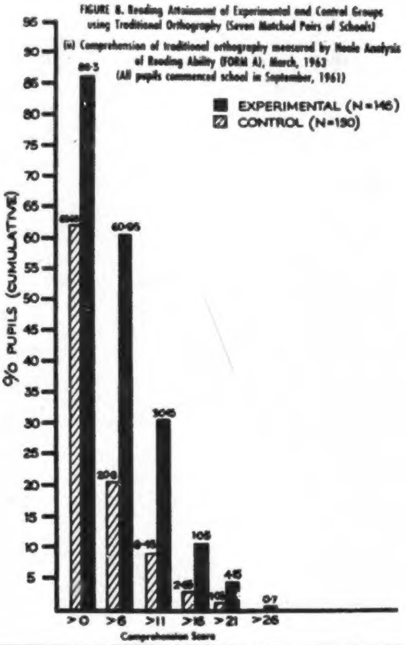


FIGURE 8. Reading Attainment of Experimental and Control Groups using Traditional Orthography (Seven Matched Pairs of Schools)

(ii) Comprehension of traditional orthography measured by Neale Analysis of Reading Ability (FORM A), March, 1963
(All pupils commenced school in September, 1961)

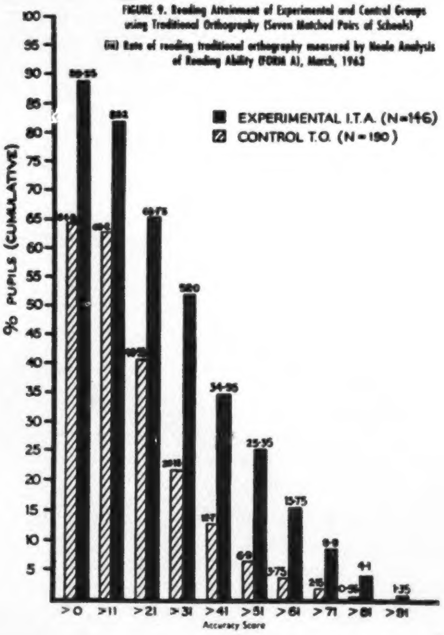


FIGURE 9. Reading Attainment of Experimental and Control Groups using Traditional Orthography (Seven Matched Pairs of Schools)

(iii) Rate of reading traditional orthography measured by Neale Analysis of Reading Ability (FORM A), March, 1963 in our research program. It is based on a small sample of pupils, and in any case, valid judgment cannot be made on this issue until enough years have elapsed to determine whether the superiority of the i|t|a pupils in reading conventional print is maintained or not.

In conclusion, we must urge caution in evaluating the findings of this interim report. The data we have been able to present at this time are from a segment of our total sample which happens to have entered the experimental and control classes earliest. The ideal standard of matching experimental with control schools is therefore not approachable. Furthermore, we are only at the beginning of a long-term study. These early results are presented as part of the history of our work to date, and as a first indication of the way the answers to the major questions may come out. Definite conclusions must be postponed until all the many vital issues connected with the use of i|t|a for beginning reading have been thoroughly investigated under the conditions of rigorous scientific control of our complete research program.

At the time of writing this paper we would only submit that the preliminary evidence we have presented is sufficient to bring this issue to the notice of all reading teachers. The conventional alphabet and spelling in beginners' books does appear to be an important cause of reading difficulty, and Sir James Pitman's Initial Teaching Alphabet, with its design for transfer to conventional print at the later stage, does appear to be a very promising solution.

2. Convention and Conformity

SIR JAMES PITMAN

The reader's convenience is compulsive in any new writing and reading medium.

When Shakespeare and Raleigh penned their own names—and much more besides—they wrote with a notorious variety. Although they wished to address their audiences as effectively as possible, they were forced to use—in so penning their words—spellings which were neither stable nor as yet conventional. These vagaries impeded communication; they existed because there had been neither the occasion nor the means to settle upon the one preferred form from among the many alternatives.

Printing made standardization both possible and essential. It represented a shift—from the convenience of the *writer* to the convenience of the *reader*. Implicit here, of course, was the recognition that communication is effective to the degree that the receiver comprehends the message. The alphabeticism of reading is far more important that the alphabeticism of writing; while the originator of a written message is aware of what he wishes to communicate, the recipient can accept that message only if the medium of communication conforms with his own reading habituations.

Mechanical reproduction of conventional symbols met the reader's need for a stable medium and thus insured the dominance of the convenience of the reader over that of the writer. There was, therefore, only one answer to the question whether print should conform to a generalized conventional standard or vary with regional and personal differences. The reader—and there were ever more of them—benefited (and the communicator gained also in the sense of being better comprehended) to the degree that the symbol on page one was identical with that on page 100, the same in one year as it was in the year before.

It would thus be retrograde for us in the 20th century to allow changes to be made in our conventional alphabet or its spellings with the purpose of making spelling easier for those already literate. To seek to correlate precisely that which is written with the variants of what is spoken, would make reading more difficult and writing not necessarily more simple. To depart from the emphasis on receptive communication in order to stress strict phonetic correlation in emissive communication would be an attempt to render speech visible—and it does not have to be visible. Indeed, it is an illusion to suppose that it ever could be. The printed page is mute and the reader has to provide his own sound values.

If then the attempt were to be made to represent speech on paper the resulting print forms inevitably must have as their real rationale the more accurate recording of sounds rather than more successful communication of meaning. Indeed, under a truly phonetic system, the communicator himself may be inhibited by the multiplicity of print forms; because of the inevitable hesitation over just *which* sounds are to be represented.

The value of alphabeticism lies not at all in the stages of final literacy, but only in the stages of acquiring it. The Chinese mandarin who can read and write is as skilled in his literacy as is any reader and writer in an alphabetic medium.

An examination of the permutations and combinations of the sounds used in the word *Roosevelt* may demonstrate the problems which would inevitably arise were the communicator to use phonetic rather than semantic criteria. If we dismiss the inacceptable variations resulting from a speech impediment (but which are, e.g. *"Woosevelt,"* nevertheless understood!) there remains the following:

1. ɷ, ꝏ, œ
2. s, z
3. e, schwa, omission
4. v, f
5. e, schwa
6. t, and omission (e.g. *"Roosevel' lobby"*)

There are thus 14 variables and 144 resulting variants. If the strong form of *e* is considered to be as adequate as the schwa, there still remain at least 48 variants!

There are other, less spectacular, variants of personal pronunciation. As Kenyon and Knott demonstrate in their *Pronouncing Dictionary of American English,* regional, and not individual, pronunciations average two variants per word in American cultured speech. Daniel Jones has recorded nearly two (frequently different again from Kenyon and Knott) in cultured British speech.

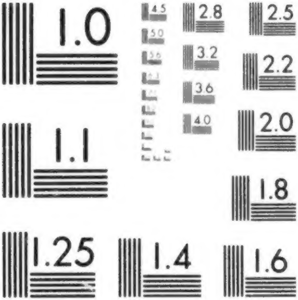
Furthermore, in addition to differences in speech from person to person as well as place to place, there are differences *within* the speech of every individual. The word *and* has at least seven, and possibly 12, variants. The simple conjunctive *and* in "bacon and eggs" has three variants dependent upon contextual or other accident: e.g., "bacon an' eggs," "bacon 'n' eggs," or "bacon ' eggs." In "law and order," many a writer would have to face the necessity of either putting an *r* in (should it then be "lawr and" or "law rand order"?) or leaving it out, while in either case modifying the rest of the word *and* in one of several ways, not excluding the dropping of the *d*.

Because we have evolved a conventional and standardized visual representation of these words with all the paraphernalia to sustain it—from printers and publishers, to dictionaries and thesauruses, as well as the vast treasure house of printed literature—it would seem that the possibility of revolutionizing our traditional orthography to reflect auditory discriminations is as negligible as the purpose in doing so would be misdirected.

Certainly, speaking as a publisher, I would decide against, and would advise others to decide against, publishing a book, destined to be read by those skilled in reading our present orthography, in any medium other than the conventional one. To depart from the conditioned conventions would be greatly resented by the customer, whose reading skills and convenience—quite apart from his preferences—would be violated.

With the advent of an Initial Teaching Alphabet, designed to correlate sound and symbol *in order to teach reading by reducing the problems faced by the beginning reader,* a comparable specter of Babelization inevitably arises. Some reading teachers—whether or not they are in the ranks of those pleading for reform of our traditional spellings—may argue that the relationship between symbol and sound should be even closer than it is in i|t|a. They may prefer **eether** to **iether, hostl** to **hostiel** or **leftenant** to **liuetenant**—and they may do this because of either a purported need for phonetic exactitude, particularly in these relatively few exceptional words, or because of jingoistic emotion.

Since I envisage the application of i|t|a to the teaching of English as a second language—indeed as a *world* language—I frankly fear the subversive effects of xenophobic variations. Even


1.0
4.5
5.0
5.6
2.8
2.5
3.2
2.2
3.6
4.0
2.0
1.1
1.8
1.25
1.4
1.6

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

within English-speaking school systems, I would discourage the excesses of phonetic accuracy. The mobility of American, British, and Commonwealth populations within their own school systems makes it imperative that the learning materials be printed in the same standard "code." By giving the copyright of i|t|a freely to the world, on condition that it is used unchanged in characters or in spellings, I have done all I may to reduce the dangers of such Babelization. I am offering, when the time comes to reprint, to make any publications over which I have any control, conform to any new conventions, were a committee (which is being set up from experts in all the major English-speaking nations) to recommend a different convention in any respect.

Standardization has so many benefits in terms of the availability of learning materials, of reassurances for teacher and parent alike, and—most important—of its reiteration that i|t|a is a learning device, with sufficient similarity to traditional orthography to make transition effortless. Indeed, the similarities between the i|t|a representation and that in the final medium have been the dominant factor in the design of the i|t|a letters and their application in spellings. The rejection of **leftenant**, **ʃheduel** and of **hostl** are objective decisions based upon this factor. The goal throughout has been to ensure as close a correlation as possible with the final medium.

It is easy to replace a "lieutenant" by a "captain" in a primer story in order to avoid this issue. It is equally simple, and infinitely more rewarding, to keep before us the fact that i|t|a is *not* a phonetic alphabet but a carefully worked out compromise between an adequately phonemic alphabeticism and traditional orthography.

Our goal is to provide a medium which will make learning to read English easier and more effective. It will lose its advantages if the teaching alphabet is capriciously changed through a misapprehension of its purpose. It will lose its adherents if it is presumed to be a reform of *our* traditional spellings. It will gain—and so will we all—if the advantages it has as a learning medium are exploited in an unvarying convention in all aspects of such literacy training.

3. Reading Instruction in Sweden

EVE MALMQUIST

The view that the child's development in reading should not be regarded as an isolated technical educational problem, but as a phase, an aspect of the child's total development, and as such, intimately integrated with it, is becoming more and more widely accepted by Swedish reading specialists. It is considered to be an interdynamic interaction between the child's general intellectual, emotional, and social development and the development of his reading ability.

Failure to learn to read may affect the development of the child's entire personality negatively. Reading is considered extremely important by Swedish school authorities and teachers for personality development and mental health of the child.

During his first days in school, the child should not have cause for anxiety and ill-feeling owing to tasks which are above his ability. On the contrary, the child ought to be given confidence that he has resources to benefit from what the school can offer. Every child ought to be given the opportunity to feel the great satisfaction and motivation for continued work which is connected with success. And that means that the teacher has to fulfill here in the beginning situation as well as later on in school life her hard but essential task to establish proper relationships between capacities and tasks.

A General Preparatory Period Before Formal Instruction

For this reason in Sweden we start the schooling very cautiously and try to make the child's transfer of activities from home to school easy and endurable. The teacher is doing her best to create in the children positive attitudes toward school and the working life there. During the first two or three weeks the child has to be at school only two hours a day. Some decades ago both parents and teachers had the notion that all children should be taught reading as soon as they began first grade. Regular reading exercises were therefore started the very first week at school, often of a very technical nature. We do not do that now. Many children need preparatory teaching of various kinds before the real reading instruction is started. Teachers at the primary stage spend much time during the first weeks of school doing exercises and playing games to develop the children's speaking and listening ability and their visual and auditory perception. The teachers also try to enrich the children's vocabulary and introduce general concepts and expressions that children will need in order to understand more formal reading instruction later on.

A Diagnostic Approach

During this preparatory period the children will be more and more accustomed to the classroom situation and the teacher has opportunities to observe children in order to get an idea of their maturity and capacity in different aspects of their development.

A knowledge of resources of an individual pupil in different areas is one of the fundamentals of planning the teaching in an appropriate and effective manner, and the primary teacher of today in Sweden is well aware of this important aspect.

If some children, according to the results of school readiness tests, observations and measurements made by school psychologists, doctors, and teachers are considered immature, it is possible for them to postpone schooling until they are eight years of age. But such pupils who are not quite ready for ordinary schools are put in special school-maturity classes with a very small number of pupils (not more than 15 but often lower). Here the teacher is supposed to be able to better stimulate the child's development towards reading readiness.

One of the main regulations of the Education Act (1962) is that the personal resources of the individual child should not only to be respected but it should be the starting point for the planning of education and teaching. The school has to stimulate any child's personal growth towards a free self-active, self-confident, and harmonious human being. The school shall give individual education.[1]

In a school where the greatest possible consideration has to be given to the interests and capacities of the individual pupil the claims of the performances within a class must vary. The use of whole class teaching as the only procedure in first grade in the elementary school with the same learning requirements for all children as to speed, the difficulty of the material and the lastingness of the practice periods is considered to interfere with a sound reading development and it contributes to the causes of reading disabilities.[2]

The children of the same chronological age differ widely in capacity to learn, intelligence, background experiences, and all kinds of personality traits.

A great range of ability of other variables at school entrance was also noted in one of my own experimental studies, recently made in Sweden.[3]

There were several children in the population studied (386 children) who had very little knowledge of letters at that time, often knowing only the letters in their own names. Two to three per cent of the children knew all the small letters. Eighty per cent of the children could not read a single word in an easy prose test, standardized for the end of the spring term and one to two per cent of them reached a standard equivalent of beginning third grade reading.

The need of organizing instruction to provide in an adequate way for those differences is therefore evident and urgent.

In order to be able to choose good procedures for teaching, a teacher must have a clear conception of the objectives of her reading instruction. Only if the teacher has realized the broad purposes of the reading program as a whole, can she successfully develop more detailed goals and make plans for separate lessons to achieve those sub-goals that are necessary to meet the needs of individual children. An awareness and knowledge of the goals is considered a prerequisite for an appropriate selection of methodological and organizational procedures as well as reading materials to fit the program.

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[1] *Läroplan för grundskolan.* Stockholm, Sweden: Kungl. Skolöverstyrelsen, 1962, p. 13.

[2] As to definitions of reading disabilities see Eve Malmquist, *Factors Related to Reading Disabilities in the First Grade of the Elementary School.* Uppsala, Sweden: Almquist & Wiksell, 1958, pp. 44-47.

[3] Eve Malmquist, *Barnens kunskaper och färdigheter vid skilgangens början (Children's knowledges and abilities at the entrance of school).* Karlshamn, Sweden: Kungl. Skolöverstyrelsen, 1961.

It is generally recognized that the first goal of reading instruction is to develop the mechanics of reading-skill in synthesizing the words by sounding and in identifying words by sight and through the use of context, structural analysis, skill of oral reading with good expression, pitch and enunciation, etc.

Meaning Is Stressed

But this is not enough. From the very beginning of reading instruction, various comprehension aspects must be stressed by the teacher. If reading is to be developed as a tool of learning and if we want to have the children to like reading, which is the most important goal, the children must feel the meaning of what is taught from the very beginning. Mere endless repetition of rather meaningless elements of words, which was formerly very common in Swedish reading instruction, is not approved by Swedish teachers.

Meaningful and interesting material is therefore used even in more technical exercises at the beginning stages in the first grade.

Adapting reading instruction to the wide range of differences between and within children normally found in any school class is a difficult but an essential task for the teacher. The teachers of the elementary grades have been given some help by administrators who lowered the number of pupils per class in grades 1-3 to a maximum of 25 (formerly 30).

Flexible grouping is used to adapt to different teaching aims. The grouping of children for developing certain levels of word recognition may not be appropriate for the teaching of sounding, etc.

In Sweden the teaching of primary reading is still to a great extent based on synthetic methods. The particular letters —the symbols for the sounds—are generally taught in connection with the exploring of specially composed pictures in the textbooks. The pictures usually represent people or animals in situations which are familiar to children. The children have to tell a little story about what they can observe in a picture. Those words which are mentioned by the children will serve as the starting point for sound analysis.

The first attack is consequently made out of the child's understandable words or sentences. After that the various elements of words—letters and syllables—are analyzed. After having learned the forms and sounds of five or six letters pupils have to try to combine the sounds to form words. From the very beginning the teachers direct attention to the meaning of what is read.

Pupils get a good technique by the phonic method which will enable them to attack successfully unknown words. And this is not the case when the word method —in Sweden often called the look-and-guess-method—is used as a basic method. It is easy to teach primary reading by this method, and the method is economical and logical, according to Swedish teachers.

Phonics and Analytic Methods Compared in a Research Study

The advantages of the phonic method in teaching Swedish first graders to read has been demonstrated by a Swedish research worker Jon Naeslund.[4]

According to Naeslund's results from a co-twin control experiment the synthetic method is more efficient than the analytic method as regards reading a continuous and meaningful text. He has also found that a synthetic method of teaching reading is superior to an analytic method when it is a question of teaching children of lower ability, and that a synthetic method yields better results in word-recognition. Naeslund's investigation did not confirm the hypothesis that pupils taught by the synthetic method are better at spelling nor is their tendency to guess when reading less pronounced than that of pupils taught by analytic methods. As regards the capacity to arouse in the pupils an interest in reading, Naeslund reports differences, though these are not significant, in favor of the analytic method.

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[4] Jon Naeslund, *Methods in Teaching Primary Reading* (in Swedish with a summary in English). Uppsala, Sweden: Almqvist and Wiksell, 1956.

Many Swedish teachers and psychologists have emphasized, however, that the phonic method has also certain limitations. When using this method the teacher starts with elements of words—sounds and letters. These elements are very abstract for the child. They might therefore very easily be uninteresting and hard to learn.

But nowadays most Swedish teachers use several methods while teaching reading. Because of wide developmental ages in school classes, it is held that every program of teaching reading should contain both synthetical and analytical methods. Otherwise there could be no provision for the aim that every individual child should be given just that special assistance that he needs. The exclusive use of only one method is disapproved.

Still the phonic method is nevertheless the basic teaching procedure for the majority of the teachers. The question to be answered is not "if" but rather "when and to what extent?"

In the first reading exercises of modern Swedish readers children come upon words with only very simple and clear structure. In the beginning the words consist of two or three letters only. It is considered favorable to start with concrete nouns. Other parts of speech are then successively introduced, with adjectives and verbs coming first and what is still more important, words which the children are expected to know very well and which they use daily when speaking are stressed. In modern readers for the primary stage the vocabulary is very carefully controlled. All new words which are introduced on a certain page in a book are noted in a special way. In an ordinary reader for the first grade, "Jag kan läsa," there are introduced in all 846 different words in a running text of 13,639 words.[5]

Various Supplementary Reading Materials Used

In addition to basic readers all kinds of supplementary reading materials are used: letter cards, word cards, sentence cards, workbooks, supplementary readers, with or without work exercises. The children are systematically trained to learn to work more and more independently with reading material of this kind. Only in this way is the teacher getting opportunities to control directly and continuously the progress of each child's reading. The independent silent reading in the elementary grades is aimed as a preparation for the continued work in silent reading in the content fields in the middle and upper grades. The working procedures must vary from whole-class reading and reading in flexible groups, to individualized reading. Reading is taught through all the grades in close relation to the other aspects of communication.

At the end of the second grade the pupils have in general "learned to read" and in the third grade they start "to read to learn." Teachers in Sweden are often heard saying so. Naturally the development of a reading ability of a work-study type—functional reading—does not come about between the second and third grades, but under all circumstances reading as an instrument for learning must be taught in the third grade. No one can succeed in school without learning to read for information. In the middle and upper grades various aspects of functional reading are stressed and so are those of recreational reading.

A Broad and Comprehensive Reading Program

A sound reading program ought to be broad and comprehensive. Otherwise the teaching cannot provide for individual differences and needs. According to directions of the Royal Board of Education the pupils must be given different kinds of reading instruction at all maturity levels: systematic teaching of basic reading skills; recreational reading; oral reading of various kinds; reading of work-study-type in arithmetic, science, social studies and history.

Every subject has its special reading difficulties according to my opinion. There is, therefore, a need for systematic instruction of study techniques in all subjects. In Sweden, programs of teacher preparation have just recently started to emphasize reading instruction of this kind.

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[5] Eve Malmquist, *Jag kan läsa* I-II (I can read) Stockholm, Sweden: Natur och Kultur, 1958.

So many teachers are still unable to make a successful attack on this problem.

From third grade on, pupils are generally given adequate practice in evaluation and interpretation of statements made by an author of a book or a journal. They are encouraged to read and think critically, which is considered very important for a citizen in a democracy. Systematic instruction in using books and libraries efficiently is also commonly given in middle and upper grades with seemingly good results.

Speed in reading seems to be neglected in Swedish schools, however. Often investigations have found average Swedish pupils even in upper grades to change speed when reading material of various difficulty levels and for different purposes.

4. Reading Instruction in Puerto Rico

ELSA GELPI

No one who is really interested in the transformation that has occurred in Puerto Rico can fail to realize that during the last twenty years it has become the crossroad of two of the most vigorous cultures of the modern world. The presence of such powerful forces in any social group inevitably brings out conflicting issues. But the meeting of the Spanish and American cultures has also brought forth much that is good for the island.

In the field of education, which is probably one of the areas most influenced by the presence of the two cultures, Puerto Rico stands out for its challenging task of teaching in two languages. The island is engaged at this very moment in revising its entire educational system in order to direct its teaching efforts towards the development of four basic values: respect for freedom, respect for human rights, attainment of a democratic way of living and a full and happy life.[1]

Included in the revision is the decision to intensify the teaching of both languages, for the teaching of these languages has been closely related to our life for sixty-five years and has affected all our teaching, especially reading.

Historical Background

Soon after Puerto Rico became an American possession, American educators on the island initiated a series of language policies which shifted the medium of instruction from one language to another in an effort to find a satisfactory way of teaching both languages. It wasn't until 1948 that Spanish became the medium of instruction and English became a second language. These successive changes of policy brought about serious setbacks in the educational development of the country because methodology and materials were changed whenever policies changed.

Reading methods followed the procedures used in the United States. On many occasions, the new methods were first tried in English and later adopted in Spanish. The results of these policies were evident in 1935 when speed and comprehension tests were administered to the children and serious deficiencies were discovered, especially at the secondary level. Alarmed by this revelation, the Department of Instruction consulted Dr. William S. Gray who after studying the situation suggested placing more emphasis on the teaching of Spanish.[2]

A new Spanish language program was started under the direction of Dr. Carmen Gómez Tejera in 1938. Later, a series of elementary school readers was published by Francisco Gaztambide and a study of the language arts for elementary grades was published by Dr. Antonia Sáez. But again the school system had to be reorganized to accommodate the junior high school. This reorganization plus the enormous amount of students who enrolled in the schools after the government provided free education, plus the return of thousands of veterans, created a very difficult situation. There was a shortage of reading materials and a dearth of well-trained teachers. In addition to these problems, the island began to change from an agrarian to an industrial community. Such a change made the revision of the curriculum necessary. At this same time the island realized that to make effective use of its location between North and South America, command of both languages was imperative. With the election of the first Puerto Rican governor, political issues which had hampered the teaching of both languages began to disappear and a major revision of the English-language program was started. Following the advice of famous linguists, English began to be taught by the audio-lingual approach. Listening and speaking was practiced before reading and writing was introduced. The use of the new approach brought about changes in the materials, methods of teaching and teacher training.

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[1] Ismael R. Bou, *The Educational System of P. R., Summary*. University of Puerto Rico, 1961, p. 10.

[2] William S. Gray, *The Teaching of English in P. R.* Report sent to Dr. J. Padin, March 25, 1936, p. 2.

Language materials were constructed first. The *Fries American Series* was designed to teach language to Puerto Rican children. At present, reading is not introduced until the third grade. At this level it consists mostly of sentence reading. From this stage students gradually pass to the stage where independence in reading is attained. Throughout the 65 years that English has been taught in Puerto Rico, one of the most serious problems has been the inadequacy of reading materials. Books written for native speakers are designed for levels which rarely correspond to the level at which they are assigned in Puerto Rico. Vocabulary content is so far above the receptive vocabulary of the children that reading becomes a chore for teacher and student. If the books are used in higher grades the interest level does not correspond. Both simplified editions and books written for foreign students are scarce. Those that are available have not proved interesting to the students.

If to the shortage of reading materials we add the problem of crowded classrooms and lack of well-trained teachers, it is easy to see why it is necessary to revise the entire educational system to cope with these problems.

What Is Being Done

We are attacking these problems in a variety of ways. In Spanish, a series of basic readers for elementary grades has been written. It follows the most modern principles of textbook writing. A modern grammar series accompanies the reading series. Some new supplementary readers are already available for the elementary grades.

In the high school, the reading course is being revised so that its content will be more varied instead of being limited to classical literature. Puerto Rican authors will be included in the course.

Besides the revision of reading courses there are many other activities in progress.

1. Reading clinics and pilot projects are being established.
2. A program for evaluation, translation, and production of textbooks has been organized.
3. A great effort to eliminate double enrollment and interlocking is being made.
4. The government television station offers educational programs at all school levels.
5. Reading tests have been standardized from the fourth grade up.
6. The College of Education of the University of Puerto Rico has revised its curriculum for the preparation of elementary grade teachers to include more content subjects as a means to improve teacher preparation.
7. A readability formula is being studied. This is probably a pioneer project which may serve as a model for other countries.
8. The program for adult education extended its services so that in 1960 it had reduced illiteracy to 12 per cent.[9]
9. In the teaching of English, Puerto Rico's principal contribution so far, has been the publication of six volumes of the *Fries American Series*.
10. A series of basic readers to be used with the grammar books has already been started. A readability formula was devised as the result of research done by a group under the direction of Dr. Ralph Robinett of the Department of Instruction. Each volume was provided with a glossary in Spanish.
11. To provide opportunities for practicing English outside of school, English Clubs have been organized over all the island and contests in public speaking, singing, folk dancing, and play acting are sponsored every year.

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[9] Ismael R. Bou, *op. cit.*, p. 261.

12. The in-service training program has been improved by the use of the exchange program and by the use of an apprentice system whereby American students specialized in the teaching of Spanish come to Puerto Rico to assist the zone supervisors, to serve as models for oral lessons, at the same time that they practice Spanish. Operation understanding is carried out by the exchange of American teachers who visit the island to study the cultural background of the children with whom they work in the States. Puerto Rican teachers are sent to the States to find out the problems Puerto Rican children meet there in order to modify or improve the teaching of English on the island.
13. An excellent course for adults is offered on television. This course is principally designed for adults who are planning to work in the States.
14. The scholarship program sends a number of teachers abroad every year and provides tuition and traveling expenses for those who study at the University of Puerto Rico.
15. Puerto Rico is a training camp for the Peace Corps. Spanish is taught to North Americans and English to South Americans who are going to teach or work in other countries.

What Is Still Needed

We have discussed briefly the historical background of the educational system and what is being done to improve instruction. Now we can discuss what is still needed.

1. Puerto Rico needs more schools. The present large enrollment is due to lack of classrooms and teachers. In 1958-59 the enrollment was 44.3 per cent beyond capacity in the elementary grades and 19 per cent in the secondary schools. The average number of students per teacher was 42.9 in 1959.[4]
2. Reading materials are needed. We still need more books in Spanish. In 1959, 33,000 books were lacking for the elementary grades and 84,000 for the secondary level. According to a study made in 1959, in order to meet the demands for the next six years, $12,000,000 will be needed to supply books to the schools.[5]
3. We also need better books. Many of our Spanish texts are inadequate because they are translations; they are not interesting to Puerto Rican students and they do not develop reading or vocabulary skills. Good books are so scarce that in some schools content books are used as basic readers.
4. Guides for teachers have to be provided to insure more satisfactory teaching of reading.
5. Clearly defined reading goals for each grade are also needed.
6. Better use and distribution of available books is necessary to provide some reading instruction for all children.

Reading Materials in English Are Also Needed

1. We need a series of basic readers designed to begin at the appropriate level in which reading instruction is started in Puerto Rico. In addition, the beginning texts should reflect the same patterns that the children have mastered orally. These readers must begin with familiar situations and gradually extend to subject matter of permanent value. Selections chosen should be varied, interesting, and should provide the cultural background that will add to the understanding of the people whose language is learned. The style should proceed from the colloquial to the literary as the student increases his command of the structures and vocabulary of the language. Coordinate, independent sentences should predominate. Expressions which deviate from general English should be avoided. Since reading in a foreign language presents such a heavy vocabulary load, care should be exercised to provide as much help as possible during the early stages.

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[4] Ismael R. Bou, *op. cit.*, p. 362.

[5] Ismael R. Bou, *op. cit.*, p. 206.

Too many new words and structures discourage even the most enthusiastic reader. Vocabulary difficulties for Spanish-speaking readers consist of Anglo-Saxon words, two-word verbs, and expressions which involve the use of prepositions. Easy words for Spanish speakers are cognate words and words of Latin and Greek origin. To lighten the load of the readers, grammatical irregularities must be explained as vocabulary items and a glossary in Spanish provided.

2. Besides the basic readers, we need a large variety of supplementary readers, written for foreign students.
3. Relocation of supplementary readers in use is necessary.
4. English teachers have to be stimulated to use the reading periods for effective development of reading skills.
5. Audio-visual aids for the teaching of English as a second language, such as films and tape recordings, are needed. Materials of these types might be very useful in other countries.
6. Schools need laboratories for the improvement of speech and intonation.

Teacher Training Has to Be Improved

1. A language institute in Puerto Rico would be an excellent addition to the educational system for it would improve the quality of English instruction on the island.
2. Salaries have to be raised to keep good teachers in the profession. If we compare salaries, Mississippi, whose salaries are lowest in the United States, paid an average of $3,200 in 1959. In the same year, Puerto Rico paid its teachers an average of $2,016. A study made in 1959 showed that employees in industries earned 17 per cent more than those who worked for the government.[6]
3. Much research is needed in both languages, especially, research dealing with vocabulary problems and textbook construction.

Though Puerto Rico faces serious problems in its attempt to improve instruction, it is making a tremendous effort to eliminate illiteracy, improve materials, and provide a sound educational program for its growing population.

5. Reading Instruction in Israel

SAMUEL NAVON

Reading instruction in Israel constitutes a central problem. The population consists of immigrants from 80 lands speaking 70 tongues. One language—Hebrew—is the basis of communication, mutual understanding, unity, and social integration. However, we are concerned not only with the social integration of these newcomers, but also with their acculturation.

The immigrants have different cultural backgrounds. The chief instruments for their cultural integration are newspapers and books. Acceleration of the process depends on the rate of acquiring reading. A great many immigrants come from eastern communities at a low socio-economic and cultural level. We have the unique problem of teaching them to read a second language in order to raise their cultural level. This adds a special dimension to the problem of reading instruction. Actually, the whole country is a reading school. We teach reading to children in the schools and to working youth in evening classes. There is a special department for language instruction in the government's Ministry for Education and Culture and a network of courses in which reading is taught to adults. The army, too, conducts special courses in reading.

But we shall deal now only with reading instruction in the schools. Reading is not an isolated subject nor an end in itself. It comprises the values and foundations of education, the means of implementing them and their application to the child being taught.

Our state is a young one, only 15 years old, but our history is a long one—thousands of years old. From the Biblical era to the present time, a vast treasure of human and ethical values was created that must be imparted to the younger generation. On the other hand, we are rooted in the modern, present-day culture. We feel that by counterposing the teachings of our prophets with the culture of our time we can make a valuable contribution to the human, spiritual, ethical, and social values.

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[6] Ismael R. Bou, *op. cit.*, pp. 354-55.

The younger generation must be active participants in forging these values. In reading instruction we are faced with the questions of quantity and quality. Quantity—how to prepare the child to read in the shortest possible time so that he can master the tremendous store of knowledge, both past and present. Quality—how to develop a creative personality able to participate in the process of crystalizing cultural-educational values.

The Israeli way of life helps us solve this problem. To create something out of nothing, to find water, to make the desert bloom, to found new settlements—particularly agricultural ones—all these needs require a pioneering spirit, initiative, action. The dynamics of such a life are social life and work.

We have adopted these principles in our schools with the rationalization that life in school and outside will then be identified. Reading, as an integral part of life, must infuse our lives with that same active, creative character. Reading, therefore, is bound up with work and creative learning.

The Principles of Reading Instruction

Reading instruction contains the following elements: (1) the need to read, (2) life situations, (3) social attachment, (4) product, (5) activity, (6) integration, (7) interest. All fuse together in the process of reading instruction.

In one primitive tribe language is called "hand," meaning "a prolonged hand," a tool of communication. Language developed out of the need to announce something, to ask for something or to tell something. The need arose in actual life situations. Printed and written words are only cultural adjuncts to communication. We must expose the child to life situations that will make learning to read mandatory for him.

For example, children in the first grade are inducted into school life in a special festive ceremony. After the celebration, they go to their room and find that pupils from other grades have prepared gifts for them and hung a sign reading "Shalom" (Shalom is a greeting used daily and on holidays, whose literal meaning is peace). The children then need to decipher this word, and thus "Shalom" is the first word taught in reading. The first graders then want to return the greeting to every grade and thank the teachers who participated in the reception. Reading and writing go hand in hand, and the children write thank-you notes using the word "Shalom." This is true social communication, expressed in an actual social activity.

The children are given a plot of ground. After they have sown the seeds in rows, they need to make signs marking the vegetables they have planted. Learning to read these words arises from a real need in a real situation.

The same applies to garden tools. A storehouse for tools is set up in the classroom, and the children use these tools. They handle them and learn their functions, what they are made of. They use the tools, all labeled. This is one of the basic activities in learning to read.

Work in the garden is accomplished as part of a community unit, and so they learn how to live in society. They emulate their pioneer fathers by redeeming the wasteland, and by doing constructive work they relate to the ideals of work and the pioneering spirit.

The motivation is toward a goal. The goal is not that of the teacher, nor is it the general, abstract goal of reading, but the goal of the children.

When the theme is a holiday, the goal is the celebration which constitutes the peak experience, and reading material is based on the symbols of the holiday, its historic significance, preparations, and the celebration itself.

As for units, we could not accept the usual procedure of one unit taught in science, another in social studies, and a third in the reader. If reading is done in groups, the units can be as numerous as the groups. We therefore searched for a central theme to integrate all subjects. This method of integration and synthesis seems psychologically best suited to the beginners because the child absorbs and expresses himself in his own way. From a pedagogical viewpoint too there are advantages in a central theme for all subjects. This concentration lends importance to the reading material and ties in with the interests of the pupils while they are absorbed in a particular topic.

Central themes are worked out according to a plan designed to make reading a systematic progression from the easy to the difficult, from the simple to the complex. Thus reading instruction is not haphazard and erratic. We have found this method of teaching reading best suited to correlating reading with the child's interests. In Latin the word "inter-est" means "exists-between," meaning a relationship between two things, such as the child and learning material. The child is most interested in reading when it is part of his activities in the area of nature, work, and community life, and when it includes literary-artistic material that is both pleasurable and gratifying. Such activities are possible in play and work, entertainment and sport, in agriculture, construction, communication, industry, trips, festivals, exhibitions, and dramatic play.

The question may be raised: Does this method provide practice in reading? The answer is "Yes." In planning the theme, time is set aside for drill. For example, the children review the words and their parts so they will be familiar with the reading material related to the theme. And what about individual differences? Reading material is planned on various levels so the teacher can fit it to individuals and to groups according to their ability. Each child learns at his own rate but is motivated to make progress. The backward child is not placed in a backward group and his contribution is not considered of less importance. He does not bear the stigma of failure.

Reading Instruction for Children of Immigrants from Oriental Communities

As has been mentioned above, we have a unique problem in Israel of teaching the children from Islamic countries such as Morocco, Algeria, Tunis, Iraq, Egypt, Persia, Kurdistan, to read. We have experimented with various ways to solve this problem.

Extension of Kindergarten

Children of immigrants on a low socio-economic and cultural level need a great deal of preparation before they can read. First we must improve their oral knowledge of the new language. We have to increase their vocabulary, to develop concepts and to foster learning habits.

Education is compulsory in Israel, including children from five years up. However, we have found that one year's preparation before entering elementary school is not sufficient. We have tried to increase the preparatory time by opening kindergartens and nursery schools to children from three to six. This experiment has succeeded, because longer attendance in a planned educational environment constitutes a solid basis for beginning reading in the first grade.

Education of the Parents

We have found that instructing the children alone is not sufficient. To succeed fully we must guide the parents, educate them, and interest them in the school. This program includes language instruction, compulsory visits of the teachers to the homes, visits of the parents to the schools for lectures, conferences, and celebrations, and guiding the parents so they will continue at home the activities fostered by the school. Generally, children learn the language faster than their parents and adjust more rapidly to the new life. There is a lag between their progress and that of the parents. The parents are aware that their control and authority over the children are diminishing. Their desire to bridge the gap and catch up with the children makes them eager to learn and be educated.

Admixture of Culture Patterns

We believe it is a mistake to regard a minority as inferior, to aspire to absorb it and to demand complete assimilation in the transition to a new culture. We try to utilize the positive values in the cultural patterns of immigrants. We use their folklore in our festivals, their songs, their dances, etc. Thus we bring them closer to our work in the schools and encourage positive attitudes.

The home conditions of these children are not particularly conducive to education and study. Backward in reading and other areas, they require additional time. We have, therefore, tried to lengthen the school day in the schools these children attend, and we have achieved good results. The children spend most of their day in a good educational atmosphere. The reading period is longer. They do their homework under the supervision of experienced teachers. They have the opportunity of engaging in other activities such as art, play, sports, and handicrafts.

Qualification of Teachers

The basic and simple axiom, that the most important ingredient in teaching is the teacher holds true here too. In any case, we are trying to ensure maximum qualifications for teachers preparing to work with this segment of the population, and we give them practical training before they finish their study at the teacher's college. We also conduct special weekly courses for in-service training.

We have experimented with training teachers from the minority groups. This is important, particularly in the first grade. The teacher who speaks the children's language, knows their mentality, understands their cultural backgrounds, is more likely to create the proper climate and closeness that helps the beginning pupil overcome the crisis of starting school and preparing for reading instruction.

The existing readers are not suitable for these immigrant children. It is difficult for them to grasp the concepts, and the language is too complicated. We must prepare special material, better graded, easier, simpler, more meaningful, and in keeping with their span of interest. It is not an easy task, but we hope to accomplish it and to supply them with material that will simplify the process of reading instruction.

Individual and Group Help

It is always better to prevent reading backwardness than to have to remedy it. A child in the first grade, who has trouble at the outset but receives individual help, is less apt to lag behind and become a remedial reading case. Help is given—mainly after regular hours—both to individual children and to small groups. Experience has taught us that in this way we decrease the percentage of children who need the help of an expert in remedial reading. The psychological advantage inherent in avoiding the sense of failure and disgrace for the child who is backward in reading needs no emphasis here.

Use of Vacation Time for Reading

Time is one of the important factors in reading instruction. This is even more true with children for whom the reading process must be accelerated. The number of school days in the school year is definitely not sufficient. It is necessary to use part of the vacation period, especially the summer vacation, for additional instruction. These children are less independent in reading on their own, and we cannot rely on their reading to themselves. The home, too, is not apt to create the proper conditions for practicing reading. A large part of what they learn is forgotten during a prolonged interruption, and we must start from the beginning. Use of the vacation period for reading is likely to be a decisive factor.

Less Reading Material and More Review

We have learned from experience that the less reading material we use and the more we review the greater is our success. We must bear in mind that the child has a twofold problem: he must acquire the oral language and its sounds, and the reading symbols and their sounds. Less material and more review helps overcome this difficulty, makes it easier to perceive and remember.

In Israel, as in other countries, the dispute among the various methods, especially between the analytic and synthetic approach, continues. Each claims to be the best and cites evidence from experiments and experience. The teachers are confused and dissatisfied and try to find an eclectic compromise: they use a little of this method and a little of that. But this too is no solution without a yardstick.

It seems to me that the divergence of approaches stems from the fact that the child himself at the age of entering school confuses us. He reveals himself in contradicting ways and we don't know what his real nature is. We are confronted with a dichotomy between play and work, legend and reality, creativity and technique, egocentricity and sociality, freedom and discipline.

Every educational philosophy that endorses a set ideology has chosen one phase of the child's development and has built a method of education and instruction on it. Basic research in child development has revealed that it is not monolithic and one-way directed. Development is an integrated process that has two bases, seemingly opposed, but which really complement each other.

The rhythmic basis in the world and in the individual determines the dual process of development. The functional-integrated process in the child's development indicates clearly that analysis and synthesis are two components of the same process. The contradiction between the global and phonetic approaches is illusory. The discrimination of printed symbols is not a "one-way" process: it is neither an accumulation of "Gestalten" nor an accumulation of "elements." Perceiving always moves in a "two-way" direction. Analysis and synthesis are interrelated and integrated, rhythmically and reciprocally. Moreover, just as there are typological and individual differences in sense perception, so is there also a tendency to one component or to the other. This functional approach solves the problem of typological and individual differences.

In conclusion: We still have a long way to go in both theory and practice in reading instruction, but the outlook for the future looks optimistic.

6. A Glance at Developmental Reading Outside the United States

BERNARD SCHMIDT

The term "developmental reading" is, of course, used to mean several different things; this fact seems to bewilder many people outside the United States almost as much as it does many of us. I will not go into these various meanings, but will try only to define the term as it is used here.

By developmental reading I mean specific training in reading efficiency for students who do not have marked physical or psychological deficiencies that require individual treatment. This training aims to help any or all but a few of the students in a high school or college, whether they are good, fair, or poor readers. The basic aim is to improve speed and comprehension. This is done through learning about the reading process, by developing flexibility, by improving the physical processes and habits involved in reading, by improving vocabulary, and by learning the various techniques in attacking any facet of reading.

Reading programs with these general aims are of course to be found all through the high schools and colleges in the United States, even though the method, emphasis, and procedure may vary widely from one program to another. When I decided to see what was being done in this area in selected English-language colleges in some other parts of the world, the first problem was making myself clear. People with whom I corresponded prior to my travels reacted in any number of ways. "Of course we teach reading," one said; "in every course good English is required." Another said, "We feel that students learn to read in grammar school, and if they cannot read, they don't get into this university." A third and persistent observation was "We have heard of the wonderful speed-reading courses in the United States and we are eager to learn how to read faster." And those who had programs were almost uniformly eager to exchange ideas and learn what is being done in the United States.

Armed as I was with some specific and much sketchy information, I set out to visit some of these schools. What I report here are some facts about the reading programs in five schools selected from the twelve I visited. Along with the facts are observations and reactions that are personal. Another person might react quite differently, or had I visited a different series of schools my own responses might have been—indeed, surely would have been—quite different. Hence, because it was too easy to get a wrong or at least a partially wrong impression, I am not naming schools. I don't want to make quick judgments based on visits often obscured by language barriers and other pitfalls of the junketing investigator.

All of you know of the large number of reading programs in the United States. In numbers and variety I think it is safe to say we are far ahead (or behind, some would say) of the countries I visited in Asia, the Middle East, and Europe. We simply have more programs using the present definition of "developmental" than they have. Some had never heard of this approach; some, like some of us, were skeptical; others were eager and enthusiastic, but had no money; still others were making a small try. And a few had fully organized programs.

I think there are several more or less obvious reasons for this state of affairs. In most of the schools, English was to the majority of students a second language. You can see at once, therefore, why for many of them reading had to be learning *to* read, not learning how to read more efficiently. Speed, for example, had to take a back seat to syntax, idiom, and the like; comprehension had to be on a more simple level than in many of our colleges. Then, too, there were schools where the old German notion of scholarship or the rather severe requirements of the English-type university prevailed. Here a course in reading efficiency was sometimes looked upon as it often is by some of our own old and long-pedigreed graduate schools. But I think the main reason for fewer programs is that the reading bug in many places has just begun to bite. The "westernization" of many colleges since World War II is apparent everywhere—not only in the large number of students, but in their varied and often humble backgrounds. Again and again I was told that money and space prevent larger enrollments in schools that even now have increases of 20 to 30 per cent every year. While in most cases entrance is by examination, officials said repeatedly that for every qualified student admitted, there are two or three qualified for whom there is no space. And it was usually in these mushrooming schools, where entrance requirements, curriculum, administrative procedures, and student-faculty relations were leaning toward the American system, that reading programs were most likely to be found. Here the efficiency-in-reading concept has the most firm hold of the imagination.

There is another fact that will, I believe, have some bearing on the spread of instruction in reading efficiency. The English language is rapidly becoming the international language; and in addition, I found English to be the "second" language more than all other languages put together. And with the spread of English, I believe, will go the interest in reading improvement. You can see this already, in the most improbable places and often stated in a most unfortunate way. "Ah, yes," I was told in places thousands of miles apart, "you Americans can teach people to read at 2,000 words per minute. How do you do it?" This point of view is of course not the only one; many of the people interested in reading improvement have their feet closer to the ground, but the Prairie Fire School, as I like to think of it, has had more publicity in the foreign press, I'm afraid, than all the other schools put together. And a lot of the foreign people are as disappointed as our own students when they are told that very, very few people ever read at even 1,000 words per minute. I recall in particular a dean in a small school, who, before letting me see his reading teacher, took me to his office, had coffee brought in, and then wanted to know how *he* could learn to quadruple his reading speed. As we all know, talking to deans is difficult enough under any circumstances; telling a dean that you can't do very much for him is harder still. Yet it's easier to talk to his kind than to those who say, as one did, "I don't want our students to read faster; I want them to read slower, so they get every bit of what's in the writing." To tell such people that research doesn't show that slow readers necessarily get more than fast ones is of little avail.

And now to a few programs selected at random.

The first case is one that you could find duplicated in almost any of our states, either in high school or college—all except for the magnificent view from the classroom window. Here is an eight-weeks course that meets two times a week, in 50-minute periods. Classes are limited to 25.

Students are selected on the basis of need, as determined by a standard reading test. Use is made of timed essays, vocabulary workbook, pacers, and lectures. The instructor told me he had had a lot of trouble with administrators, who were suspicious of the course. His results, however, were good enough: doubling of speed and a 5 per cent gain in comprehension, based on standard testing devices. He pointed out that his materials had to be somewhat easier than average because to many of the students English was a second language. For his freshmen he used 11-12 grade reading matter. This instructor was a psychologist, and had had reading-teacher training at a West Coast university.

The second school is a good example of the confusion in terms concerned with reading. Correspondence indicated that the school did have a reading program. As it turned out, "reading" meant oral reading in the freshman and sophomore years in a composition-speech course. Here there is a great deal of study in sentence structure, grammar, punctuation; there are exercises in pronunciation, (corrections being made by both the instructor and the better students) and there is work in debating and recitation of essays and poetry. Although all students are expected to know English when they get to this university, and English is required in grades one through twelve, the course is nevertheless required of all incoming students.

However, the same school has a course called English Comprehension. Here there is intensive work in idiom, main idea, organization, kinds of English prose, and vocabulary. Although there is no timed reading, comprehension questions in multiple choice form are used for some of the essays studied. My impression of this school of 13,000 is that the standards are high, the students and staff able, and that a lot of western ideas are being examined. The department head complained that there was room for only one out of three of the students who passed the competitive entrance examinations. He took all the information I could give him on starting a more specific reading course. He felt that many students are very slow readers because they are afraid to go faster, that they are following the word-by-word pattern they used in learning English in the lower grades. Furthermore, the structure of the language is baffling. They use as many American books as possible, he said, because such books are especially useful in idiom and structure.

The next university has a course called Reading for Comprehension, given by the English Department. It is mandatory only for "weak" readers as defined by an elaborate silent reading test with multiple-choice questions. The test has several questions on main idea, theme, author's purpose, and tone. The material in the course itself consists of provocative essays, poetry, and short novels. Students are encouraged to read the material twice before class—once rapidly to improve speed, and the second time a bit more slowly to sharpen insight. The course chairman said classes are informal, and discussion is encouraged. The main stumbling blocks are idiom, author's purpose, and the literal-mindedness of many students, who know the English language, but not what the language can mean. The novel *Animal Farm* is used to illustrate this. The chairman said that even many of the brightest students are confused by the Orwell novel. Author's purpose is discussed at great length in this course. Both objective and essay questions are used in testing. But it is in no sense a course in composition—rather, as the chairman said, a course in "how to think in English."

Again in this school, many students are turned away for lack of space. Like most of the other educators I talked to, the chairman felt that the teaching of English as a foreign language was one of their most important problems.

In this school really severe cases are sent to special tutors in the department of psychology.

The fourth school is privately owned and operated; it is run for profit. Situated in a country where public education has lagged, it has low standards. It eagerly accepts any graduate of high or technical school, and there is a good deal of beating the bushes to get students. As a result, the enrollment of some 10,000 is an odd mixture. The course which was supposed to be a reading course was a substandard variety of remedial English. The workbooks, published by the school, were of perhaps junior high school difficulty. There is a great deal of oral reading in the classes, executed much as our oral reading is done in grade school. In this country languages are a political football, and three, including English, are required as official. Twenty-four hours are necessary for a major in English. One of the instructors said he had heard about our "speedy reading" courses, and would like to try such a course, but the administrators said it would have to be in all three languages, and that would be too expensive.

The fifth school has one of the best developmental reading courses of which I know. The man in charge was once head of a reading laboratory in the United States. The instructors are trained by him. The course runs 16 weeks, meets twice a week for one hour, is not required, but has three times as many applicants as can be cared for. One hour credit is given. Student enthusiasm runs high. The materials used are workbooks, pacers, films, and tachistoscopes. Both speed and comprehension are emphasized. There is much work on flexibility, different kinds of comprehension, vocabulary, idiom, analysis, and reading for appreciation. There is a well-equipped laboratory with a large library of books and magazines for use with or without the pacers. The course is a kind of showpiece for the university, and good relations exist between the reading staff, administration, and public. Night classes for adults have been added and have been very successful.

M. Differing Opinions in Reading

1. When Should Reading Instruction Begin?

SUE MOSKOWITZ

For several years, newspapers and magazines have announced excitedly that children of preschool age have been taught to read. Some of the reports have been phrased in such sensational and vague terms that the investigators whose work they described must have been dismayed rather than flattered.

Can young children be taught to read? Of course. Terman and Hollingworth reported early readers long ago; and every kindergarten and first grade teacher has had children who were already reading. Some knew a small number of words; others could read with some ease. But many educators and psychologists say the wrong question is being asked: Not *can* young children be taught to read, but *should* they? In his inaugural speech as president of Teachers College, Columbia University, Dr. John H. Fischer said, "What a pupil can do and what he should be doing are not necessarily the same."

In general, specialists in early childhood education hold that kindergarten and nursery school are not the places for formal academic lessons—for pressure to achieve; that the preprimary grades are the child's first introduction to a large social group. School is a strange and bewildering place; the child must gradually learn to get along with others, learn routines, to follow a daily program, to sit quietly sometimes and listen to others, to work independently, to face problems in social adjustment, to share the teacher's attention with many other children, to concentrate, to be active, to take initiative, to experiment, to work out simple problems. He also begins to learn informally about social studies, science, mathematics, creative arts, language arts, and health. All this in perhaps three hours a day with 30 or 35 other children.

Yet kindergartens in a number of communities are introducing the systematic teaching of reading. It must be admitted that pressure from parents is often responsible. In the light of sensational publicity it is not surprising that many parents have become anxious about having their young children read or even regard precocious reading as a status symbol.

However, the studies themselves are very interesting and worth following with close attention. It should be said in passing that most of them have received sizable grants from such sources as the Ford Foundation, the Carnegie Foundation, and the United States Office of Education.

Current Studies of Reading or of Readiness Before the First Grade

Perhaps the most widely described, because of the current interest in teaching machines, is Omar K. Moore's experiment in teaching very young children—age two to five—to read. At first the basic instrument used in the experiment was an electric typewriter. Each child worked with an adult teacher in a one-to-one relationship. As the child struck the keys willy-nilly, the teacher simply said the names of the letters struck. From letters, the child proceeded to words and then to sentences which were projected on a screen. A basic idea of Moore's is that the adult must not teach at all but must be completely neutral; the child's activity must be "autotelic"—self-motivated without any introduction of reward or punishment—even encouragement. The teacher must make no suggestion or explanation. For that reason—and because of the obvious impossibility of providing a teacher for each child outside of an expensive experimental situation (the experiment is said to have cost about $400,000.) Moore has developed the typewriter into a highly complicated computer that assumes the function of teacher. At present, the machine costs $25,000, but under mass production should cost about $10,000. It is presently being tried out under Moore's guidance in a private school in Connecticut.

Reactions to a movie showing Moore's experiment in action have included frequent comments that the learning situation is tense. Moore himself is said to be particularly interested in the fact that some of the children didn't learn to read, and is seeking to account for it. He is writing a brochure that is to be published at a future date.

An interesting variation on the Moore experiment was a pilot study in 1961 by the Social Psychology Laboratory of the University of Chicago. Using Moore's electric typewriter technique, they attempted to teach reading to a group of four-year-old Negro children from a slum area, though not from the worst conditions to be found in the city. However, the children failed to learn; they failed to progress from the initial stage to the next, and showed negative reactions to frustration. The researchers concluded that the failure was due to the difference in many ways of their lower-class children from Moore's middle-class children. They therefore decided to drop reading instruction and to embark on a reading-readiness program in which no activity would be more important for the children than reading aloud to them. They feel it is important that children hear an adult reading, see and handle the book, and experience a warm relationship with the teacher.

Another study dealing with the education of young lower-class children is being carried on by New York Medical College under Martin Deutsch and Rebecca Winton. Their thesis is that lower-class children enter school so poorly prepared to produce what the school demands that initial failures are almost inevitable. In their experiment 60 four-year-olds are attending two New York City public schools. The children are not being taught to read. The emphasis is on language expression and comprehension, as well as on training in auditory discrimination, focusing attention, followiing directions, and visual perception.

The effort to prevent reading failure among underprivileged children is also responsible for the development of two new sets of basic readers. It has often been said that many city children from poorer homes do not identify with the predominantly middle-class white children in our basic readers and trade books. A series of readers developed in the Detroit public schools and another by Bank Street College in the New York public schools are picturing non-whites as well as whites, and will use city-oriented content. The Detroit books, already in print, have the usual controlled vocabulary; the Bank Street books aim for fewer vocabulary restrictions and natural speech rhythms, and are to appear in 1965.

An experiment that has received wide notice is being carried on by the Denver public schools. Parents of pre-first grade children receive televised instructions on how to use a book of exercises called "Preparing Your Child for Reading" with their own young children. This program does not aim to teach young children to read; the prescribed activities are better described as prereading: hearing consonant sounds, supplying words in oral context, knowing letter forms and letter sounds. The Denver experimenters expect to follow the progress of the experimental group for some years to see whether children with this type of training by their parents show advantages over those without it. Reactions to this experiment have ranged from approval of involving parents in the educational training of their children to concern that in a number of cases very young children may be pressured by parents who have no talent for teaching.

One of the most interesting studies of early reading is Dolores Durkin's study of 49 children who had learned to read at home before they entered the first grade. The children came from varied ethnic and socio-economic backgrounds. Dr. Durkin was particularly interested in their personalities: in general they were quiet and passive, had good memories and concentration, curiosity and persistence. She was interested in finding out also whether these early readers would hold on to their reading advantage over fellow classmates who had not learned to read before they came to the first grade. A follow-up study in the third grade showed that the brightest two-thirds had not maintained their advantage — the bright nonreading entrants had caught up with them. But the lowest third, who were in the "normal" range of 91 to 110 still maintained some advantage. Dr. Durkin will make another check at the end of the sixth grade, and is also now replicating the study in the New York City public schools.

It is interesting to note that in a study of Scottish children who were taught to read at the age of five and a comparable group of English children who began learning to read a year later at age six, the English children had caught up with the Scottish by about the same age as Durkin's bright non-early readers caught up.

While we are on the subject of Europe, some mention should be made of beginning reading there. In the Scandinavian countries and in Russia the schools do not begin reading instruction until the age of seven, at which time children enter the first grade. The Soviet kindergarten—which extends to age seven—features the development of oral language but makes no attempt to teach reading. Scandinavian psychologists and educators say that a delayed beginning lowers the incidence of later reading disability. Research on readiness in Sweden is being done in a program to identify potential cases of reading disability in the early weeks of the first grade. Eve Malmquist of Stockholm reports that 380 of such children were given a special program with promising results. A similar experiment with 1,200 pupils from 12 different cities is also going on, and results are to be available in 1964.

Advantages of Not Hurrying to Begin Reading

It can be seen from the summaries of these current studies that they have not proved that reading *should* be taught in the kindergarten or earlier. In fact, several stress readiness for reading and not early instruction and two suggest that non-early readers catch up anyhow. Furthermore, none shows evidence that early reading instruction can be successful to any worthwhile degree with the majority of children who enter our schools.

Why should ordinary schools in ordinary communities not teach formal reading in kindergarten classes of 25 to 50 children?

Reading, like walking and talking, is a developmental task. A large number of research findings indicate that there is a high relationship between readiness for reading and a child's physical, intellectual, emotional, social, and experiential development. Pushing an unready child into formal instruction can create destructive feelings of fear, and inadequacy.

Various research studies have demonstrated that many young children have difficulty in associating symbols and meaning, in seeing and remembering small differences between forms, in associating symbols and sounds.

It is possible with effort to train children—like seals—to make the correct responses. But research evidence points up the futility of straining to do what can be done naturally and quickly a year or so later. There is little or nothing to gain by pushing, but plenty to lose. Early failure in school is responsible for many behavior problems.

Research findings have shown that a child's I.Q. and general readiness have a high correlation with his later achievement. Both controlled research and examination of school record cards indicate that non-early readers tend to catch up to comparable early readers.

A variety of studies have concluded that children who enter first grade after a good informal kindergarten program are better able to proceed with systematic learning than those who do not. In fact, many schools group first-grade children without kindergarten experience in separate classes.

More and more, we are finding that among our reading failures are brain-injured children with normal intelligence and no cerebral palsy. They do have severe perceptual difficulties. These children show the emotional disturbance of school failure and frustration. New York City has 36 special classes for them and also a long waiting list. It is important that teachers be trained to observe their pupils carefully for some time before rushing them into formal reading.

It is questionable that starting instruction at age three to produce sixth-grade readers at age six yields useful results. I am thinking of Bobby, who at the end of the first grade could read the *Reader's Digest* aloud fluently and stylishly. But he didn't have the background to understand what he read, and besides he really wanted to read the Hardy Boys. (Incidentally, he had had only nine months of reading instruction.)

Certain observers of kindergarten reading instruction have commented that while the teachers labored with the top group of children the other 20 or 25 sat at desks writing, tracing, or copying. They question whether the activity was worthwhile for either group in terms of the boredom of the sitters and the tension of the readers.

Research Findings Favor Not Hurrying Children

Those doubting the value of early reading instruction can point to many research findings in their support. A number of these bear out the contention that physical, intellectual, emotion, social, and experiential readiness all play a significant part in determining whether the child will make a good start in reading. Since there are far too many studies to cover in a short time, I shall refer only to some of those dealing with two questions:

1. Is it of value to precede formal instruction with kindergarten or first grade readiness programs.
2. Do courage and patience in delaying instruction for those not ready hinder or help later reading achievement?

Lorene Teegarden compared the first grade reading progress of children who had had kindergarten training with that of children who had not. She found that those with kindergarten experience were more likely to make satisfactory reading progress and also reversed and confused letters less often. A study by Irene Fast led to a similar conclusion: children with kindergarten training ranked significantly higher in the first grade in word recognition and paragraph reading. Sister Mary Nila found that groups given first grade readiness programs before the start of formal reading showed higher reading achievement by the end of the year than did control groups taught formal reading throughout the year. Three other studies by Inez B. Petersen, Elizabeth L. Woods, and Carrie M. Scott also showed the superiority of readiness experiences and training over none in terms of latter success in reading. Helen Roche studied a group of children judged not ready for formal reading. They were given more readiness activities before formal instruction and by the fourth grade surpassed the comparison group who began formal reading immediately on entering the first grade. Beatrice E. Bradley got similar results in a study comparing children for whom formal instruction was delayed and those who began at once.

Lorraine Fuller studied a group of kindergarten children with foreign language handicaps. She found that directed language experiences increased the rate of reading progress of the experimental group as compared with a control group. A study by Doris Waters and another by Selma E. Herr led to similar conclusion.

W. F. Brazziel and Mary Terrell studied the effects of a readiness program on a group of 26 Negro first graders from rural homes with few books and little interest in reading. Not only on a reading readiness test, but also on an intelligence test, the experimental group made scores close to the national norms while the control group remained very low.

A number of studies have demonstrated that starting formal instruction for children when older, not younger, pays reading dividends. B. V. Keister studied the effects of giving instruction in reading to three first-grade classes of five-year-olds. At the end of the year, her three classes achieved almost up to the first-grade norm. But after the summer vacation, the teachers reported that the children had forgotten so much that they practically had to start all over. At the end of the second grade, the children were still well below the grade norm. Jennie L. Thomson, over a four-year period, compared children who began reading before age six with those who were somewhat older. She found that the younger children not only made slower progress but did not develop as great a liking for reading as the older children.

In Oak Ridge, Tenn., Inez B. King studied 104 children who entered first grade together. She compared 54 children age five years eight months to five years 11 months with 50 children aged six years five months to six years eight months. Although the younger group was brighter, by the end of the sixth grade the older group was one year four months ahead of the younger in reading. A far higher degree of school maladjustment was reported by the teachers for the younger group.

Mabel V. Morphett and Carleton Washburne studying groups in Winnetka, Ill., found a very high correlation between mental age and reading progress. Washburne also did a well-known study of what happened when formal instruction was delayed. Four first-grade classes were carefully matched for ability. Three classes started reading instruction at the beginning of the first grade; the fourth, not till the middle of the second grade. But by the end of the third grade, the delayed class had caught up with the others, and by the end of the eighth grade was a year and a half ahead.

All the current experiments I described earlier are well worth watching. If successful, they have suggestions for alterations in our teaching of reading; but not until proof is given that they really are advantageous in terms of later achievement, and that they are good for young children. There is too much research evidence to be ignored showing that children not ready for formal instruction are liable to fail to learn, with resulting hostility towards education; and also that starting formal instruction early at best yields little or no advantage in later achievement, when non-early readers tend to catch up.

In any case, it is up to educators to protect children from the swings of fashion in public opinion and from the pressure of those who really know little about young children.

2. At What Age Should Systematic Reading Instruction Begin?

NANCY MCCORMICK RAMBUSCH

The most effective sequence for many areas of school learning is undergoing reexamination, and in no areas are partisans more heated than in the field of "reading." However, systematic reading instruction for the child of preschool age, whatever its varied forms might be, must necessarily bear little resemblance to the stereotypical view, now rarely operative, of children of first grade age being initiated into reading in groups, all reading the same thing at the same time.

Reading implies bringing meaning to the written word as surely as deriving meaning from it. The period of the preschool years provides the raw material of the meaning that formal reading will later enhance.

There are many areas of emphasis appropriate for the preschool in developing language skills directly related to later competence, but "those" relating to the child's ability to teach himself to read individually in a school environment, are the ones I would like to emphasize.

Perhaps inadequate emphasis has been placed on the crucial role of language in early childhood, and the irreversible deficit can be caused in later life (Goldfarb), as evidenced in institutionalized children and culturally deprived (Reissman) children in urban areas.

> "It has not been customary to think of early childhood as a period of important growth in the child's knowledge and his ability to think. Priority has been given other kinds of development. For this reason it has been natural to feel that it is relatively unimportant to supply variety and depth of information to a young child. This aspect of a child's development is frequently considered as taking on real importance around six years of age when he enters the first grade of school. It is paradoxical that the learning we expect of him at this later period demands a background of experience and understanding which we have considered relatively important in early childhood. The ability to read, for example, requires a rich background of concepts and understandings from which the child derives his spoken and written vocabulary. This same skill demands the ability to discriminate between written symbols, to associate personal experiences with the symbols, or words, which stand for the experience, and to think logically in the process of following the ideas being read."[1]

> "Since language responses are learned, the laws of learning may help explain the differences among children in language proficiency. The stronger the motivation to use language, and the more effective the reward that speech brings, the more developed language behavior should become."[2]

Stimuli appear to be more distinctive when specific language labels are applied to them. One of the tasks of the teacher of the preschool child is to help the child classify his environment through the association of the appropriate word with the stimulus.

The ideas of Maria Montessori which related to the role of systematic language development and reading instruction cannot be viewed as originating with her. They are part of a tradition of physiological education derived by Montessori from Edouard Sèguin and Jean Marc Gaspard Itard. Many of the seminal notions of Montessori come from Sèguin's work, expressed definitively in his Idiocy and Its Treatment by the Physiological Method.

It was apparently not the original intent of Montessori to allow the procedures which have been associated with her "method" to attain the inflexibility they have in the hands of the most ardent and uncritical of her disciples.

At the outset, in working with young children, Montessori, applying what she knew to be successful from her work with retarded children to a normal-child population, in the way of activities demanding of the child sensory motor involvement in classification and distinction among forms, dimensions, textures, weights, had no conscious thought of teaching reading and writing systematically. Montessori folklore would have it that the children themselves asked to be taught. In any event, many children through the procedures used by Montessori in the design of activities which were child initiated, were able to learn to read in a so-called "spontaneous" fashion.

Points of interest in the Montessori approach for the teacher of the young child rest on the role which the teacher assumes in identifying for the child the objects and sensations with which he is dealing, demanding where possible that the child use the words, rather than gestures, to make his needs known, by the teacher's speaking clearly to the child and offering him opportunities to respond in the service of early language development.

In the Montessori approach, writing and reading, composing and dictating, all seem to occur in conjunction with each other. A typical sequence might be the exposure of the child to an environment in which objects are both labeled and named by the teacher and manipulated by the child. The child sees words as wholes. He also sees and feels the letters which compose the words, the letters being cut out of sandpaper and then often grouped by the teacher in her demonstration of the way they sound when together.

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[1] Kenneth D. Wann, et al., *Fostering Intellectual Development in the Young*. New York: Teachers College, Columbia University, 1962.

[2] Paul Henry Mussen and John Janeway Conger, *Child Development and Personality*. New York: Harper, 1956.

When the child knows some of the sandpaper "sounds," he is free to combine them in new combinations, which he can do without reading them back. This accomplishment gives rise to quite literal transcription of sounds into words at the time when the child appears to be engaged in the synthetic task of clustering sounds to create known and understood words, rather than analyzing the sounds of ready-made words. Following the composition of words with a small movable alphabet, the child might begin to compose short sentences and stories. He will often embark on copying lists of words or labels or printed material that appeal to him at this time, quite independently of his interest in composing words or transcribing conversation.

The use of simple command cards by the teacher, inviting him to engage in certain activities, which he learns, through reading—provides a transitional step in his development to the point where he can read, with comprehension books, always easy enough for him to master completely.

All of this activity, as it is carried out in a Montessori class, alternates between individual and small groups. Matching names to pictures might be a form of lotto, or it might be an individual exercise. The teacher is present as the resource person who can help the child move horizontally to more activities of one type or vertically to a more difficult or novel facet of learning in the sequence leading to reading.

There is a real emphasis on self-selection of activities in a Montessori learning situation which reflects the thinking of Montessori. Therefore, as many children come to school motivated to learn to read by parental pressure, others evidence no interest at all. This lack of interest the teacher must respect, because the motive for pursuing independent activity must ultimately be an intrinsic one. The teacher in her many individual presentations of activities offers the children opportunities to see how various sequences develop, and if a child is sufficiently interested, he will at least observe the work of the others, whether or not he participates.

The emphasis on the appropriate form of language development for preschool children cannot be divorced from the role of language as a learned skill, or the role assigned to it by the culture as an important one.

Systematic instruction leading to reading should be a concern of teachers of young children, if by this is meant attention paid to the developmental stages of language, some of which, if ignored in the early years, appear, at present, to lead to irreversible language deficits.

A language-rich school environment for young children, in which the teacher articulates, identifies, relates language to the experiences of the children, is an attempt at systematic exposure. Activities which provide for differentiation in visual perception are appropriate for the preschool child.

Most of these activities exist in some measure in nurseries and kindergartens, but they are not always thought of in their relation to language development.

The group of Doctors Sèguin, Itard, and Montessori, who coupled careful observation of the child with manipulative material through which he could relate experience to language and ultimately to its expression in symbolic form, were suggesting a form of systematic activity, not as an inflexible linear sequence, such as the preprimer, primer, first reader would provide, but as a cluster of experiences which would help the child pursue visual clues, and transcribe speech into symbolic written form, prior to the formal exercise of reading, which should ideally build on prior experience.

3. Phonics Instruction—When? What? For Whom?

H. ALAN ROBINSON

A complexity involved in determining "When should phonics instruction begin?" is in determining "What is phonics instruction?" Most of the studies do not describe programs of instruction in detail. They are vague about specific teaching procedures and content. Terms are used without suitable definition. Formal phonics, analytical phonics, synthetic phonics, incidental phonics, and phonic readiness are often used with the apparent expectation that the reader will understand without explanation. Hence, phonics instruction has become a term that often means different things to different people.

Phonics instruction, in this writer's opinion, is direct, planned teaching aimed at helping a pupil analyze printed or written words to determine their pronunciations. As Gray has indicated, the child uses visual clues ". . . as aids in determining consonant and vowel sounds, syllabic divisions, and accented syllables." Pupils must be helped to refine visual and auditory discrimination, ". . . to associate consonant and vowel sounds with letters of the alphabet, and to blend these sounds into syllables and the syllables into words with appropriate accent."[1] Phonics instruction, then, concentrates on helping pupils synthesize what they see with what they hear in order to achieve accuracy in pronunciation.

If this definition of phonics instruction is valid, *phonic readiness* must be considered much more than the "ear training" a number of investigators suggest it may be. From the investigations of people in the speech field (2, 8), it is obvious that articulation of sounds is an important concept in phonic readiness. By the chronological age of four and a half the average child can articulate as many as twelve consonant sounds. On entrance into first grade he can articulate all vowel sounds and sixteen to twenty-one consonant sounds. However, it isn't until the end of grade three that most children are able to discriminate among most sounds (12). It appears that a great deal can be done with very young children in getting them to articulate sounds although more time seems needed in the development of auditory discrimination.

It also seems that much work needs to be accomplished in helping children discriminate visually—not for the so-called, nonexistent look and say program—but for the phonics program. Success in phonic analysis depends upon the achievement of skill in each modality—visual and auditory. In addition, it would seem imperative that much emphasis be placed upon training in synthesis. Visual and auditory discrimination must be synthesized if a pupil is to achieve ultimate success in phonic analysis.

When to Begin?

"When should phonics instruction begin?" is an ancient, confusing, and still essentially unanswered question. Only seven reports spanning the years from 1925 through 1958 (1, 3, 4, 5, 7, 10, 14) represent the total range of "answers" contributed by research. In these studies suggestions for when to begin phonics instruction are given in terms of mental age or grade placement.

Reporting in terms of mental age, Arthur (1) concluded that a mental age of six and a half was the optimum time for introducing phonics instruction although some gains in phonic ability were made beginning at a mental age of five and a half. She based her conclusion on the results of a study of 171 first graders grouped according to mental age. Arthur's research design was well conceived, but the teaching variable was not controlled. Dolch and Bloomster (3) also conducted a study of mental age and phonic achievement. They found, on the basis of scattergrams made from 115 scores, that children of high mental age might *sometimes* fail in acquiring phonic skills but children of low mental age were certain to fail. A mental age of seven seemed to be the lowest at which a pupil could be expected to use phonics. Dolch and Bloomster's study, although it had a number of limitations recognized by the investigators, was carefully designed and replicated. The word-attack tests used, however, were experimental and no information was furnished about their validity and reliability.

Durrell's recent report (4) based on four doctoral studies challenged the importance of mental age. Three of the investigators found that mental age had a low relationship with the ability to use phonics and with reading achievement in general. Durrell recommended teaching phonics, at varying rates, to all pupils at the very beginning of the first grade. Helen Robinson, in a detailed critique of the Durrell report, concluded that it did ". . . not supply dependable evidence to determine . . . whether or not teaching letter names and letter sounds before teaching a sight vocabulary is essential."[2]

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[1]William S. Gray, *On Their Own in Reading.* Chicago: Scott, Foresman and Co., 1960.

Reporting in terms of grade placement, Garrison and Heard (5) concluded that most of the training in phonics should be deferred until grades two and three. McDowell (7) and Sexton and Herron (10) found that the teaching of phonics was of little or no value during the first half of first grade. Sexton and Herron added that instruction in phonics was of greater value in grade two. Winch (14), in a study of teaching beginners to read in England, also suggested delaying phonics instruction until grade two. The children in grade two of the English infants' school, however, were a year younger than American children in grade two; hence, Winch really concluded that phonics instruction succeeds with most school children who have reached the chronological age of five and a half. The studies concerned with beginning phonics instruction and grade placement, although interesting in terms of group trends, suffered from hazy control of significant variables.

These few studies, with their flaws and limitations, appear to represent the only available evidence of any substance relating mental age or grade placement to beginning phonics instruction. Numerous professional writers, apparently basing their conclusions on some of the available evidence, have generalized about the inadvisability of beginning phonics instruction before the mental age of six and a half or seven, or prior to a given time in the chronology of instruction. Perhaps such generalizations are necessary since no other conclusive proof is available and teachers need the guidance in order to develop an instructional program. On the other hand, such generalizations, repeated over the years, eventually seem to become accepted as factual information. Authors build them into reading series, curricula are based on them, and teachers accept them. After a while, especially in instructional situations, no one is sure of where a given generalization comes from, but its very existence gives it some magical importance. The doubter, the person with another concept, will find it difficult indeed to overcome the bias growing out of the "now-established-as-conclusive research evidence."

The professional literature does not contain, by any standards, adequate reports by teachers discussing classroom experimentation in detail or reflecting about possible changes in phonics instruction viewed by the teacher who has taught first graders for five or ten years. Since there is a paucity of controlled research concerned with when to start phonics instruction, and since it is most difficult to design research so that all variables are controlled, an accumulation of accurate reports by teachers would be of great value. Every effort must be made, however, to report evidence based on logical approaches tested and retested in many situations.

Even then questions about "Which came first, the chicken or the egg?" may be raised, and with reason. For example, the results of Russell's study (9) of teachers' views on phonics indicated that the teachers favored emphasis on phonics in grades two and three or in different grades dependent on need. What certainty is there that this opinion is based on years of experimental and creative teaching? Weren't these teachers probably taught how to teach reading through the use of professional materials and with the help of instructors dedicated to delayed phonics instruction? Weren't they probably teaching reading with the help of manuals and instructional materials based on the concept of delayed phonics instruction? Could they report without built-in bias?

Begin with Whom?

If phonics instruction incorporates the steps of visual discrimination, auditory discrimination, and synthesis of the two, the research on *when to teach phonics* is indeed inconclusive. Even those reading programs labeled "traditional" or "look and say oriented" introduce this kind of phonics instruction in the kindergarten or very early in the first grade. Perhaps research directed toward when the *various steps* of phonics instruction should take place is needed.

There is no reliable evidence that points to the latter part of kindergarten or to a mental age of five or to the first month of first grade as the best time for concentration on auditory or visual discrimination. There is no reliable evidence that proves 50, 100, or three sight words learned by pupils make them then ready for phase one of phonics instruction.

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[2] Helen M. Robinson, "News and Comment: Methods of Teaching Beginning Readers." *Elementary School Journal,* LIX (May, 1959), p. 426.

Can such evidence be obtained? Would such research not be subject to the same basic flaws obvious in almost all of the research concerned with phonics instruction—lack of attention to the individual abilities and needs of pupils. Certainly the research directed toward the appropriate time for instruction in phonics, reported here, has dealt with group behavior, medians, and averages.

A small body of research has been directed toward certain kinds of individual needs. Investigators (11, 12, 13) interested in the auditory learning modality, have indicated that all children may not profit from an auditory-approach to reading. Wepman (12) suggested that instruction, at least in the beginning stages, be individualized in terms of auditory and visual learners. He indicated that children ". . . who show inadequate discrimination of the discrete units of speech sounds usually have poor articulation in speech and equally poor ability to learn to read by phonic approaches." He suggested that ". . . the teaching of reading as well as therapy for the articulatory inaccuracy in speech production should first approach both tasks from other modalities, e.g., visual or kinesthetic."[3] If the question of when phonics instruction should begin were now posed, the tentative answer would have to be related to ability or needs in auditory discrimination.

In the Garrison and Heard and Dolch and Bloomster studies, there appeared to be some evidence to support the conclusion that bright children in the first and perhaps the second grades received more help from phonics instruction than the dull. One can assume, therefore, that another answer might be to start teaching phonics to the bright and delay instruction for the dull. Grimes and Allinsmith (6) on the basis of a study of third graders in two city schools, concluded that pupils who are highly compulsive, highly anxious, or both, will achieve better under a phonics program than under the "look and say" approach. In this case the question of *when* seems related to personality traits.

It seems essential that thought and research related to phonics focus on the individual needs of pupils. A great deal has been written and said about individuals and their needs, but research and instruction still seem pretty far removed from practical utilization of the concept. A number of questions related to the time for beginning phonics instruction must be answered. Do individual pupils learn to attack words in very different ways and at very different times? Are there enough similarities about the way some children learn so they can be grouped for instruction in terms of certain modes of learning? Would instruction based on specific learning needs accomplished in kindergarten or the beginning of grade one permit some children to use phonics earlier? Should some pupils never be given instruction in phonics? If phonics instruction is begun very early, can there be an adverse effect on pupils' school progress in later years?

In a recent address concerned with the future of beginning reading instruction, Gates stated that "whatever age is adopted as the 'normal' one for beginning reading, some children can start earlier and others should start later for optimum results. The one certain outcome of research on the age of beginning reading is that an educational-psychological case or clinical study should be made of each child to determine the best time and method of introducing him to reading."[4]

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[3] Joseph M. Wepman, "The Interrelationships of Hearing, Speech and Reading," *The Reading Teacher*, XIV (March, 1961), p. 246.

[4] Arthur I. Gates, *A Look Ahead.* Comments made at a Conference on Possibilities of Improving the Teaching of Reading in the Primary Grades, under the auspices of the Department of Health, Education, and Welfare, Office of Education, Washington, D. C., November 16, 1962, p. 2.

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4. When Should Phonics Instruction Begin?

JOSEPH E. BRZEINSKI

It is said, that in other times, a favorite topic for discussion and debate was the number of angels who could stand on the head of a pin. Currently, in its ability to engender discussion, the subject of reading perhaps occupies a similar position. Whenever topics such as the teaching of phonics or of beginning reading are mentioned, quite strong views are expressed by parents and teachers alike. Professional journals, books, newspapers, and magazines have had numerous articles on these subjects. Many of the stories contain conflicting and quite contradictory claims and counterclaims.

Research evidence is inconclusive. As Russell recently wrote concerning phonics, "Unfortunately, no investigation in this area can be labeled definitive. At least thirty experimental or applied researches have been carefully done but they all have some limitations in score or technique."[1] That no definitive answer has been found is also reflected by the question under discussion, "When should phonics instruction begin?"

To remove this problem from the realm of fruitless discussion, the Denver Public Schools decided to obtain objective data concerning the subject. Some national publicity has been given to this effort. The purpose of this report is to provide information concerning this research project which may be of some help in answering the above question.

A great deal of time during the first year was spent in reviewing pertinent research. It soon became apparent that studies concerning beginning reading and phonics abound. However, because this is such a complex subject, most studies tended to investigate a fragment of the problem. This needs to be kept in mind when these research findings are cited. Then, too, the context of each research study needs to be remembered. In deciding when beginning reading and phonics should be taught, it is necessary to consider the individual learner, the kind and quality of the materials and processes to be taught. Obviously, the time at which a highly complex system of phonics dependent upon memorization of rules and their application could be taught would vary considerably from other less rigidly structured methods.

In summary, available research evidence appeared to establish that:

1. The mental age at which beginning reading and phonics could be taught is quite dependent upon the methods and materials of instruction.

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[1] David H. Russell, "Reading Research That Makes a Difference," *Elementary English*, XXXVIII, No. 2 (February, 1961), pp. 74-78.

2. Auditory perception and visual discrimination are essential for successful teaching of beginning reading and phonics. Some evidence also indicates skill in these areas can be developed by specific training.
3. Success in beginning phonics and reading achievement is highly correlated to the child's opportunities for reading prior to entry into first grade. Recent evidence supports the position that early knowledge of letter names and sounds correlates substantially with reading success in first grade.
4. Children have been taught beginning reading and phonics at ages earlier than at which they presently are being taught in most public school systems. More detailed and comprehensive investigations concerning introductory reading and phonics techniques in relation to individual differences remain to be carried out; for, in most kindergartens, quite a wide range of ability exists. Some kindergarten children may be capable of learning beginning phonic and reading skills.

Parenthetically, since the study began, there is a growing body of evidence to support the hypothesis that "The foundations of any subject may be taught to anybody at any age in some form."[2]

Reports emanating from Yale University, the University of Pittsburgh School of Education, and Teachers College, Columbia University, suggest that many three- and four-year-olds, if intellectually challenged and stimulated, can begin the intellectual learning process.

Perhaps, as was stated at the 1959 Woods Hole Conference, "Readiness, that is, is a function not so much of maturation as it is of our intentions and our skill at translating ideas into the language and concepts of the age level we are teaching."[3]

With guidelines similar to these in mind, a research design was carefully framed. Its main focus was an experimental comparison of beginning the teaching of reading through the use of phonics and meaning clues in kindergarten with beginning such teaching in the first grade. Six hypotheses were formulated dealing with the comparisons to be made among four treatment groups. The main variable distinguishing the groups was the time of beginning the teaching of reading—kindergarten versus first grade. Numerous other variables of importance were included. These were concerned with reading vocabulary, reading achievement, reading habits, the quantity of reading, the incidence of reading disability, and the like.

Because of the complexity of the research design and the need for carefully planned instructional materials, it seemed desirable to approach the project in a cooperative manner. Such an approach secured the competencies of each of the participants needed in a project of this scope. Serving in an advisory capacity in the initial formulation of the research design were Dr. Wilbur Schramm, Director of the Stanford Institute for Communication Research, Dr. Howard E. Gruber of the Behavioral Research Laboratory of the University of Colorado, and Mr. Theodore E. Albers, Director of Research and Statistics of the Colorado State Department of Education. Dr. John L. Hayman of the Stanford Institute for Communication Research is statistical consultant and analyst for the project. Working with the Denver Public Schools as reading consultants are Professors Paul McKee and M. Lucile Harrison of the Colorado State College. Reading materials produced by them comprised the trial reading program.

Reading Method

Seven groups of beginning reading activities were developed. Primarily, these activities provided practice in using beginning consonant sounds with contextual or meaning clues to identify a printed word. In the pilot method, phonics, i.e., the teaching of letter names and sounds, played an important role along with the use of context or meaning clues.

The rationale for the system used is

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[2] Jerome S. Bruner, *The Process of Education*. Cambridge: Harvard University Press, 1960, p. 12.

[3] Jerome S. Bruner, *On Knowing—Essays for the Left Hand*. Cambridge: Harvard University Press, 1962, p. 108.

based on the fact that kindergarten children can recognize many thousands of words when they hear them spoken. They know both the sounds and the meanings of these words. They do need to be taught that the sounds they know are represented by the particular letters and letter combinations in the printed words. This skill, united with contextual or meaning clues, provides early steps toward independent reading.

No workbooks were used in the kindergarten. The reading activities combined an auditory-visual approach suitable to group instruction. It has been suggested that the activities used are a kind of prereading or reading readiness program. Since readiness is a complex term subject to many understandings and misunderstandings, the teaching procedure was designated either beginning reading activities or simply reading. The method was designed to capitalize upon individual differences innate in children. Teachers were encouraged to advance at a rate consonant with the interest and ability of the children.

Research Procedure

Preliminary Study

In the Spring of 1959 the reading method developed was tried in fifteen kindergartens. Suggestions for improvements and modifications based upon this experience were received. While the materials were being revised, planning continued and a preliminary study was inaugurated in approximately 30 kindergartens during the second semester of the 1959-1960 school year. Purpose of the preliminary study was to test the research design which had been developed and to discover what problems might arise.

Main Study

In the Fall of 1960 the Denver Public Schools, with the aid of a grant from the Cooperative Research Branch of the United States Office of Education, began a longitudinal research study to determine the effectiveness of beginning the teaching of reading in kindergarten. Progress of pupils in the project is to be studied through the fifth grade.

When the main study began, the Denver Public Schools had about 9,000 kindergarten children divided into about 300 classes. This study involved 122 classes randomly assigned by school to control and research groups. This resulted in 61 classes in the control group and 61 classes in the research group. Thus, approximately 4,000 pupils were divided equally into control and research groups.

The children in the control classes followed the regular kindergarten program. Children in the kindergarten research classes received instruction in the beginning reading activities every day. The remaining two hours and ten minutes of the kindergarten session was devoted to established kindergarten procedures. When the children in the study entered first grade, the research and control groups were in turn divided into two groups. This division provided four first grade groups.

Group I which had the regular program in kindergarten and the regular program in the first and later grades; Group II which had a regular program in kindergarten and the research program in the first grade; Group III which had the research program in kindergarten and the regular program in the first and later grades; and Group IV which had the research program in kindergarten and the adjusted program in the first and later grades.

Group I provided a necessary basis for comparison with the research groups. Group II permitted a comparison between groups who had received the same instruction introduced at different times. Group III made possible the assessment of the effect of early reading not followed up—a danger often encountered in a short-term study. Group IV was established to test the full effect of beginning reading in the kindergarten followed by a program accelerated to take advantage of any gains made.

The study is longitudinal and the pupils are to be tested periodically using standardized reading tests and other appropriate measures including specially devised tests and evaluative techniques. The primary variable considered was time of beginning reading. Other variables included mental age, chronological age, I.Q., and family characteristics. The principal statistical technique used has been analysis of covariance. This method of analysis, in effect, equates or matches the groups being analyzed. Because the design has large numbers of experimental subjects, the statistical work has been programmed for computers.

Results

Since the present study is of a longitudinal nature, any conclusions based upon the findings reported at this time must be considered tentative and applicable only to the trial procedures. Indeed, it would be well to view these conclusions as hypotheses subject to further testing, modification, or verification.

Kindergarten Findings

Analysis of data gathered in the kindergarten was made to determine the suitability of the trial method and materials for that age level. This analysis involved a pretest administered in October 1960 and a post-test in May 1961. A teacher questionnaire provided additional information. The results indicated that:

1. Kindergarten children could and did learn certain beginning reading phonic skills.
    - Kindergarten-age children were able to learn letter forms, letter names, and letter sounds.
2. A planned program of systematic instruction in beginning reading skills appeared to be more effective than a program which incidentally provided opportunity for the development of reading growth. Both groups made gains. The classes with the planned program gained an average of 21.8 points while the classes with an incidental program gained 12.9 points. This difference was statistically significant at the .001 level of confidence.
3. Children taught the beginning reading skills in kindergarten did not forget them during the summer intermission. The possibility existed that since the pilot classes seemed to learn more than did the control classes, they would also forget more during the summer months. To test this hypothesis 49 children in the pilot group and 49 children in the control group were tested in September 1961 when these children had just entered first grade. The children in the pilot group had an average loss of 1.45 points while the children in the control group had an average loss of 3.47 points. The difference in these means is not statistically significant, seeming to indicate that the children in the pilot group maintained their advantage during the summer months.

That not all children progressed at the same rate is among other findings shown by an analysis of kindergarten data. Some children made little progress in learning the seven steps of the trial program. Some children were able to read preprimers and primers during the latter part of the kindergarten. Most children were able to recognize letters, to learn letter names and sounds, and with the help of context, to read words. Analysis of teacher questionnaires and interview data showed that growth in reading in the kindergarten could be achieved without greatly modifying existing kindergarten programs through better utilization of the time presently available.

First-Grade Findings

Tests used to gather data in the first grade were the Gates Primary Reading Test and the Gates Advanced Primary Reading Test. Analysis of adjusted test scores suggests that

1. The children who had the beginning reading activities in kindergarten scored significantly better at the end of first grade than did the children who had the regular kindergarten program.
    - The pilot group which began reading in the kindergarten had an adjusted mean score of 114.35, which was 18.45 higher than that of the control group which started reading in the first grade.
2. Optimum reading achievement was obtained when adjustments were made in the first grade program to take advantage of gains made in the kindergarten.
    - Pupils in this category had an adjusted test score mean of 118.06. This was 10.70 higher than the group which had the beginning reading activities in kindergarten and the regular program in the first grade.
3. The time of introduction of the beginning reading activities had a significant effect on achievement. Those children who were taught the pilot materials in kindergarten were significantly better readers than those children who began the same method in the first grade.
    - The children who had the beginning reading program in kindergarten and continued with an adjusted program in the first grade scored 13.92 higher than those who began the pilot method in the first grade.

These differences reported are significant beyond the .001 level of confidence.

Conclusions

Results at the end of two years of study appear to establish an advantage for children who had an opportunity to learn elements of beginning phonics and reading in the kindergarten. Knowledge of letter names, sounds, and forms, used in combination with context, seemed to help children progress successfully when they later began to read in books. A practical implication would be the provision of appropriate possibilities for growth in reading in the kindergarten. Growth in reading is too important to be ignored or left to chance incidental development. Results of the present research study suggest planning must occur if kindergarten-age children are to experience continuous growth in reading concomitant with their growth in other important areas. Experience has shown such growth need not be at the expense of growth in other areas vital to a sound, balanced program of kindergarten instruction.

5. The Future of Individualized Reading: Bright and Promising

IRENE W. VITE

The future of Individualized Reading is forecast by this weather prophet as bright and promising. Probably the most reliable weather vane in this respect is the controlled research on reading achievement, especially in the case of research designs which include many children over several years of time with significant findings in favor of Individualized Reading over Ability Group or Basal Reading approaches. The sum total of the other research studies and reports in the literature provides additional direction pointers which can not be ignored. Yet to be carefully assessed are many values in terms of attitudes and human relations readily acknowledged by participants in the program, but which seem to defy measurement. However, before looking at the research, let us turn attention to other evidences which indicate conditions of "Go" for Individualized Reading.

Materials as Indicators

An increase in the availability of materials, an increase and/or sustaining of sales in materials, and an increase in the usage of materials related to the topic all seem excellent indicators of the future of Individualized Reading. In 1958, the first pamphlet was published bearing this term in its title and including self-selection and other practices associated with Individualized Reading today.[1] It is now in its second printing. Sales increased in 1962, 34 per cent over 1961. The first hard-cover book which focused directly on Individualized Reading came out a year later, in 1959.[2] Sales for this book hit a peak in 1960, its first full year of life, and have maintained the same high ever since. In both cases it would be normal to have had a decline in sales. In 1958 books on curriculum and methodology numbered only two or three that had descriptions of Individualized Reading within their covers. Today, in 1963, there are at least five pamphlets, four hard-cover books, and, according to a bibliography compiled by Duker,[3] nineteen books on curriculum and method which include a section on Individualized Reading.

Doctoral and master's dissertations, once they hit the library shelves, are quite frequently buried in the dust. A librarian at Teachers College Library, Columbia University, reports such unusual and increasing activity in regard to dissertations on Individualized Reading that there is presently being considered a change in library policy to permit a special heading for Individualized Reading dissertations in the card catalogue. This unusual activity holds true also for interlibrary loans which go out to many parts of the United

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[1] Alice Miel (ed.), *Individualizing Reading Practices, Practical Suggestions for Teaching.* New York: Bureau of Publications, Teachers College, Columbia University, 1958.

[2] Jeannette Veatch (ed.), *Individualizing Your Reading Program.* New York: G. P. Putnam's Sons, 1959.

[3] Sam Duker, *A Bibliography on Individualized Reading.* Brooklyn, New York: Office of Testing and Research, Brooklyn College of the City University of New York, November, 1962. Typed and reproduced.

States. The numbers of dissertations and research studies on this topic have increased. In the eight-year period from 1950-58, there were only 13 studies on Individualized Reading as far as can be ascertained at this time, while in just a two-year period, 1959-61, 29 accounts of such research appear in the literature. These have been mostly on reading achievement.

A film on Individualized Reading[4] has proved to be maintaining popularity of unusual proportions both in sales, as reported by the Bureau of Publications, Teachers College, Columbia University, and in rental distributions as reported by the Yeshiva Film Library, New York City. Distribution for sales and rentals of these two sources include Canada and representative parts of the United States. The Film Library seldom services the New York City Public Schools since this system maintains its own film libraries. Indicative of the popularity of the film is a statement by a representative of the Yeshiva Film Library. "If we buy four copies of a film it is most unusual. Eight copies of *Individualized Reading Instruction in the Classroom* are kept in constant circulation; four have had to be replaced because they became worn out. This makes a total of twelve films purchased of this title." This is additional evidence that the interest in Individualized Reading is being maintained.

Children Are Reading More Books

While multicausal factors are involved, more children are reading the better type of trade books, children are reading more books of all kinds, and more children are reading in their leisure time than ever before. The American Book Publishers Council, Inc., report that it is this better type of trade book which has made the largest gain in recent years. In terms of the numbers of copies sold, the dime story type book (retailing for $1.00 or less) increased 6.1 per cent while the better type book (retailing for $1.00 or over) increased 17.6 per cent, for the year 1960-1961. The increase in dollar sales over the nine year period, 1952-1961 is even more startling. The dime story type of book increased 162.9 per cent while the better type book increased 230.1 per cent, right at a time when advocates of Individualized Reading began to swell the ranks.

Accounts of Individualized Reading in the professional literature have stated more than once that when Individualized Reading programs move into the schools, the shelves of the local public library often become depleted, necessitating new policies and emergency action on the part of the library to meet the needs. While there are numerous contributory reasons for the rapid increase in circulation figures of libraries, it is interesting to note that in the period mentioned in the circulation figures given below that Individualized Reading programs were becoming more numerous and were swinging more vigorously into action. The New York City Library, serving Manhattan, The Bronx, and Staten Island, has seventy libraries which include children's rooms. The juvenile circulation in these libraries has increased from 2,549,279 books in the period, 1946-1947, to 4,674,570 in the period, 1961-1962.

While figures are not available on this, there seem to be more opportunities for teachers to become knowledgeable about Individualized Reading. Workshops on Individualized Reading are available in colleges, there are in-service courses in public schools, consultants are at work with city systems to help launch programs, panel discussions and speakers are on programs of professional conferences at local and national scenes.

Research Reports

The table on page 234 is the result of an attempt to classify research studies under a few manageable titles. A short study of the chart reveals that there was only one significant study in favor of Ability Grouping (and this study did not use the words "significant" in describing its findings). On the other hand, there were eight significant studies favoring Individualized Reading. In studies using Ability Groups as controls but without significant results, four were in favor of

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[4] *Individualized Reading Instruction in the Classroom.* New York: Bureau of Publications, Teachers College, Columbia University, 1956. Supervision by Alice Miel and Irene Vite.

EVIDENCE FROM THE PROFESSIONAL LITERATURE ON THE MERITS OF INDIVIDUALIZED READING

Type of Study or Type of Report	*Number and Names In Favor of A.G.*	*Number and Names Neutral Results*	*Number and Names In Favor of I.R.*
Control Studies Claiming *Significant* Results; District, City, or National Norms Used	**(1) Safford**		**(3) Aronow, Robinson, and Smith**
Control Studies Claiming *Significant* Results; Ability Groups as Controls			**(5) Acinapuro, Gordon, McChristy, Sperry, and F. W. Walker**
Control Studies Claiming One Approach Better Academically; Ability Groups as Controls	**(4) Roseman, Wells, Williamson, Karr**		**(10) Cyrog, Greenman and Kapilian, Duker, Derbyshire, Gresham, Hilson, Jackson, Norcross, Pirsig, Sperber**
Control Studies Showing Inconclusive or Neutral Results; Ability Groups Used as Controls		**(13) Anderson, I., Anderson, W., Boney, Boney and Leman, Braidford, Carline, Donahue, Field, Izzo, San Diego Country Reading Project Committee, Sartain, Senderling, C. Walker**	
Studies with Evaluations Other than Controls			**(6) Arkley, Criqui, Garment, Hart, Parker, Steiner**
Reports of Academic Achievement Measured Against Standardized Tests and/or Expected Achievement for the Group			**(34) Boney and Agnew, Bruce, Burrows, Carson, Crossley, Dean, Dickart, Dickinson, Evans, Fay, Fowler, Gumlick, M. Harris, Hildreth, Jenkins, E. Johnson, M. Johnson, Kingsley, Largent, Loomis, Marcatante, McVey, Newton, Picozzi, Rollins, Schmidt, Schnitzer, Sharpe, Sibley, Thompson, Van Allen, Vite, Warford, Young**

Ability Grouping, 13 were neutral, and ten were in favor of Individualized Reading. These studies were measures of reading achievement. Six studies which did not use Ability Groups as controls, but evaluated in some other way, found in favor of Individualized Reading. The total of all studies using controls in favor of Ability Grouping was five while those in favor of Individualized Reading were 18 (and 24 including all studies). Add to this the numerous accounts in the literature of children making unusual progress academically and other ways, and we have 58 accounts favoring Individualized Reading.

A few words of ramification might be in order for a few classifications. F. W. Walker's study was significant only for the lower half of the children, the slow learners. Karr found Ability Grouping only slightly exceeding the Individualized Group but found additional values in favor of Individualized Reading. Irving I. Anderson did not conclude in favor of either group although the Individualized Reading Group had an I.Q. advantage of ten points and did not catch up with the Ability Group until the sixth grades, having started later. The Sartain study was neutral in three of its parts and significantly in favor of Ability Grouping in regard to the slower learners and vocabulary growth. However, both the Individualized Reading Group and the Ability Group made amazing progress for slow learners. For further information concerning the studies, an article by Groff is very comprehensive.[5] In the same periodical an article by Duker supplies some information concerning dissertations and studies at the master's level not heretofore made public.[6] For an analysis of some of the studies, an article by Sartain[7] and one by Vite might prove helpful.[8]

Robinson reports on an Individualized Reading Program which began in North Carolina in 1950 and numbered 16,000 children in the program in 1959.[9] Scores from the *California Achievement Test Battery: Reading* showed these children achieved thirteen months above the national norms in both grades one and three and twelve months above the national norms in grade six.

In a study of the City of New York and its Individualized Reading Program, Aronow[10] reported that 351 children, who had had Individualized Reading for at least two years and four months in the intermediate grades, who were representative of New York's diversified school population, with no significant differences from all the children in New York City taken as a whole (I.Q., sex, achievement, socio-economic level) at the third grade, achieved significantly better than did the New York City children as a whole by the end of the sixth grade.

Summary

On the basis of the materials available, purchased, and used, and the evident interest in Individualized Reading discernible at conferences, workshops, and meetings, and the results of comparisons favoring Individualized Reading, it would appear to be no "flash in the pan" but here to stay.

6. Research Reveals Questions Educators Raise About Individualized Reading

ELAINE P. WONSAVAGE

Teachers are seeking information about a promising method of teaching reading —individualized reading. They want to know the what, when, how, and why of the method. A questionnaire concerning the problems in individualized reading was sent out in 1962 by *My Weekly Reader* to 90,000 principals and supervisors. More than 5,000 answers were received. After tabulating 2,500 of the questionnaires, a pattern stabilized indicating what most principals and supervisors thought the problems of individualized reading were. Many respondents wrote comments and letters in addition to answering the questionnaire. The answers received raised many questions about individualized reading. Let's examine these questions and responses. Keep in mind, however, that many of these same questions could be raised about other methods of reading. The questions raised do not necessarily imply opposition to individualized reading, rather they indicate the need for help and information.

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[5] Patrick Groff, "Comparisons of Individualized (IR) and Ability Grouping (AG) Approaches as to Reading Achievement," *Elementary English,* 40 (March, 1963), p. 258.

[6] Sam Duker, "Master's Studies of Individualized Reading," *Elementary English,* 40 (March, 1963), pp. 280-282.

[7] Harry W. Sartain, "Research on Individualized Reading," *Education,* 81 (May, 1961), pp. 515-520.

[8] Irene W. Vite, "Individualized Reading—The Scoreboard on Control Studies," *Education,* 81 (January, 1961), pp. 285-290.

[9] Ruth Robinson, *Why They Love to Learn.* Charlotte, N. C.: Heritage Printers, 1960.

[10] Miriam S. Aronow, "Study of the Effects of Individualized Reading on Children's Test Scores," *The Reading Teacher,* 15 (November, 1961), pp. 86-91.

From the questionnaire, the tabulation showed that 86 per cent of the respondents favored individualized reading as a method of teaching. Frequently, however, this approval was qualified. Individualized reading did not mean the same thing to all people. It was most frequently confused with an independent reading program used in conjunction with reading taught in groups.

Several major problems concerned supervisors and principals in starting and carrying out an individualized reading program. Teacher readiness and understanding was checked by 77 per cent of the respondents as a problem. Concern was expressed about an insufficient supply of materials for an adequate program by 53 per cent of those who replied. The high cost of an individualized reading program was regarded as a problem by 31 per cent of those answering. Other problems checked by 5 per cent of the supervisors and principals could be classified as problems concerning the effectiveness of the teaching of skills in an individualized reading program.

The percentages given for each of the problems mentioned do not total 100 per cent because respondents often checked more than one problem that concerned them.

Problem 1. Teacher Readiness and Understanding

Teacher preparation and background was the greatest problem according to the answers and comments on the questionnaire. Individualized reading was regarded as a more complicated and difficult method of teaching than teaching by the group method. Questions were raised about teacher readiness and understanding in the following areas necessary to the successful operation of an individualized reading program: (1) a wide knowledge of children's literature and the ability to select large numbers of trade books having qualities which interest children of a particular grade level; (2) the ability to assign reading levels to trade books; (3) a thorough knowledge of reading skills necessary to develop independence in reading, and the ability to teach these skills without the guidance of a manual; (4) the ability to prepare quality practice materials for skills improvement; (5) the ability to prepare questions for each of the trade books used in order to develop comprehension skills adequately; (6) a wide knowledge of diagnostic reading techniques in order to devise follow-up corrective programs; and (7) the ability to devise additional individual reading activities. Principals and supervisors question whether the average teacher can prepare the necessary materials and design 25-35 separate, individualized reading programs a year.

Teacher time involved in the preparation and maintenance of an individualized reading program was another concern of supervisors and principals. They questioned whether the average teacher is able and willing to spend the time to ensure a successful program. A time consuming job was considered the keeping and maintaining of an up-to-date record system of the skills developed, those in need of development, and the type and number of books read by each child. The teacher time involved in the role of librarian was mentioned as a problem. Frequent trips to the library and other sources for books, and maintaining a library system in the classroom take teacher time. Supervisors and principals also wondered how many of their teachers would spend time during the summer preparing and collecting materials for the initiation of an individualized reading program.

Problem 2. Instructional Materials

Cost of materials for an adequate individualized reading program was considered to be a problem by 37 per cent of those answering the questionnaire. Respondents stated that in some instances the funds from the local school board would not be adequate to provide sufficient materials for such a program. Some systems reported that a small amount of funds might be available from the PTA, but that this source could not begin to provide the money for the quantity of materials desired.

Amount of materials needed for an effective individualized reading program presented wide differences of opinion among principals and supervisors. According to the answers on the questionnaire, 10 per cent indicated that the minimum number of trade books for each classroom to carry out an effective program in individualized reading would be 25; 23 per cent indicated 50 books; 19 per cent felt 75 books to be the minimum; 34 per cent chose 100 books; and 4 per cent thought that more than 100 books would be needed. Ten per cent of the respondents did not check any category. These figures are interesting in light of two factors: first, the 100 books felt to be the minimum by the majority (34 per cent) is below the amount of books recommended by many authorities on individualized reading; and second, that an almost equal number of respondents (37 per cent) felt that the materials in an individualized reading program would cost more than the funds available for reading materials in their system. Don't these two factors raise a very practical problem?

Sources for materials for an individualized reading program were listed as: the classroom library; the school library; the public library; the teacher's personal library; and the children's home libraries. This writer would like to state that if a major source of books is to be the school or public library, many communities will have difficulty in obtaining sufficient materials. A December 1962 report by the United States Department of Health, Education, and Welfare stated, "about 128 million of our people have inadequate library services or none at all, and approximately half of these are in urban areas. About two-thirds of all the elementary schools in the country are without libraries."[1] For the schools to place additional demands on already inadequate services of the public libraries in order to provide instructional materials for individualized reading poses a genuine problem.

Suitability of materials used in teaching individualized reading concerned many of those answering the questionnaire. Questions were particularly raised about the use of trade books as materials of instruction. These questions pertained to the variety of type size, the uncontrolled sentence length, and the lack of vocabulary control found in trade books. People questioned the suitability of trade books to teach reading skills. Respondents felt that trade books were designed to teach an appreciation of literature, not reading skills. The question was also raised that if we are to teach word analysis skills to develop independence in reading in a sequential, developmental pattern, teach study skills, and teach comprehension skills, are trade books the proper material?

Problem 3. The Skills Program

Placement of skill building in individualized reading and the method of teaching skills presented another problem to supervisors and principals. A concern was expressed over the lack of readiness procedures developed for each book in the individualized reading method. Questions were raised such as the following: Are skills taught at the proper time, and is the proper time before a child reads a book or as he reads a book? How can a child read with understanding if concepts are not clarified before reading? Will erroneous concepts and methods of word attack be developed and practiced? Can the teacher develop the reading skills a child needs in a five- or ten-minute conference once or twice a week or in an occasional group meeting? Can the child discover the various shades of meaning for himself? Which is better, to teach meaning of words directly or incidentally?

Some respondents were concerned that in teaching reading by the individualized method, the teacher might omit some skills, or might not be able to maintain a balance of skills that need to be developed in a particular grade. Also, some comments on the questionnaire were directed towards the lack of opportunity to develop critical thinking.

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[1] Wilber J. Cohen and John G. Lorenz, "Library Services," *Health, Education, and Welfare Indicators* (December, 1962), page v.

A substantial number of comments were made about self-selection as a method of teaching. The question was raised whether the child was being instructed on his recreational, instructional, or frustration reading level. In trade books there is no vocabulary control. How do teachers determine, then, at which level the child is being instructed?

Allotment of time for teaching skills was another concern. Most comments were directed toward the ability of the average teacher to develop the following in a conference lasting on the average of five to ten minutes: discuss the story; listen to oral reading and diagnose difficulties; teach detailed word analysis skills; guide comprehension; develop work-study skills; teach the child to adapt his reading rate to the material at hand; teach appreciation of literature; motivate the child to continue reading; keep an immediate record of what was done in the conference and what future needs will be; supervise the activities for the rest of the class; and supply unknown words to other children needing help.

Summary

These questions are some of the many raised by educators about individualized reading. The questionnaire indicated great interest in the method, but also revealed an urgent need for answers to problems in initiating and carrying out this type of program. Ninety-two per cent of those answering stated they would be interested in learning more about individualized reading. The main areas of concern were: teacher readiness and understanding, instruction materials, and the skills programs.

Before putting an individualized reading program into operation, teachers, principals, and supervisors should consider the many problems involved and how to solve them. Without such thoughtful examination, the individualized reading method faces a future of frustration and disappointment to all concerned.

7. Parable for Passengers on Professional Bandwagons

HARRY W. SARTAIN

Once upon a time there were two small coal-mining towns on the side of a long gray-green mountain. And in each town there lived a baker, who was sincerely concerned with serving his people. Each wanted to help his neighbors obtain as much nourishment as possible so they would have abundant energy and not be entirely exhausted by the hard labor that was demanded of them.

The baker in the first town was praised by more than half of the people for the fine, solid, nutritious loaves that he produced to satisfy their hunger. But because he wanted to please more people and provide even more nutrition for all of his clientele, he pondered ways of improving his bread.

He reasoned that since people liked his bread for its solid, filling qualities, he would make it even more solid and filling. Therefore he gradually increased the proportion of good brown flour in his dough while reducing other ingredients. Of course this made the loaves as solid as anybody could possibly desire. And certainly they were filling, if one could chew them. But as the loaves became more solid and more filling, the people began to complain about the lack of flavor in the bread and about the broken teeth in their mouths.

The baker was anxious to produce the best bread possible, but being convinced that his method was the only correct one, he continued to increase the proportion of flour in his recipe until his loaves were nearly as solid as the banks of coal which his neighbors mined.

Pressure for a Panacea

Since these people were more concerned about bread than almost anything else in the world, and since the baker did not seem to know how to improve his own business, the people sought an authoritative consultant for him. Living some distance away there was an admiral who had gained great fame by designing a new ship that could be maneuvered on the waters in a manner that amazed the citizens of many nations. Feeling certain that such a man could solve the routine problems of their unsophisticated baker, they sent for him.

The admiral gave the situation the cursory study that he felt was enough to provide one with all the information needed in order to become an authority on such a mundane vocation as baking. Then, being an engineer also, he concluded: "Your problem is not with your recipe, but with the size of your baking pans. It is easy to see that some people have stronger jaws than others. Those who have weaker jaws cannot chew the same size of solid, nutritious loaves as those having stronger jaws. Therefore I order you to bake one third of your loaves in very large pans, one third in medium-sized pans, and one third in very small pans. This will solve your problem."

The baker did as he was commanded and the people came to buy his new loaves. But instead of selecting the size of loaf that was suited to the strength of their jaws, it was found that because of prices, the poorest people were forced to buy only the small loaves while the richest bought the large ones. The bread was still of a bituminous texture and flavor, but the richest people were exceedingly pleased with it. The large loaves added immeasurably to their social status because such loaves could not be purchased by two thirds of the people. Likewise the middle-class people were pleased because they could show loaves in their cupboards and on their tables that were larger than those that the poorest third of the people could buy. Thus the majority of the people in the town gave overwhelming approval to the admiral's baking methods. But secretly the people began baking more of their own bread and buying only enough to show off their social position. Finally the baker had lost not only his reputation, but his business as well.

The baker in the second town was as anxious as the first baker to provide his people with abundant energy. He decided that the most promising approach was to encourage the people to eat *more* bread. He felt sure that it was the yeast in bread that gave it the fine texture and flavor that tempted people to devour it in quantities. Consequently he reduced the amount of other ingredients and gradually increased the yeast in his recipe.

Some people began to complain about the large bubbles of air in the loaves, but the baker was certain that his method was the right one, and he continued to increase the yeast content. Now the loaves were light and flavorful, but as the proportion of yeast was increased, the dough ran over the sides of the pans making shapeless blobs instead of loaves. The people began to find that their stomachs were not filled by these puffy pieces, and they became suspicious that the baker was trying to cheat them by selling shapeless loaves whose value could not be easily judged. Finally they, too, demanded that their baker accept the advice of an authoritative consultant.

Since the people had lost their respect for bakers, they sought an authority outside that profession. Their attention was drawn to the name of a famous psychologist who lived afar. This man had earned his university tuition as a mechanic, and later he won fame by inventing a machine that utilized a long roll of punched paper to teach white mice to squeak in four-part harmony.

The psychologist studied the baker's loaves briefly and concluded: "Your problem is not related to your recipe; it is much more complex. The air in your bread is all in a few large irregular bubbles instead of being distributed in properly spaced tiny bubbles that can be consumed by the people without frustrating them." Then he directed the baker in building a machine that used a punched paper roll like that from a player piano to inject exactly ten million identical yeast bubbles into each loaf as it baked.

The new machine made every loaf appear beautifully fluffy. Because the loaves were now perfectly identical in appearance, the people felt sure they were not being cheated; they were exceedingly pleased. Of course, the nutritional value of the loaves was still as poor as before, but the people did not recognize this for a number of months. Then they rode the baker out of town on a rail. But the psychologist had long since left the place and made a fortune selling a book on the improvement of baking.

Basic and Individualized Reading

It hardly seems necessary to add that in the future we teachers of reading must cease taking an "either-or" view on individualized and basic instruction. This closed-minded attitude is bound to stand in the way of progress. The result is that we risk losing some of the high regard that the public holds for education, and this at a time when the welfare of our children necessitates that people place greater value on education than ever before.

Over the years we have learned a great deal about the competencies required by the mature reader. Because teachers have used solid basal programs, children are more skilled readers today than ever before in our history. Can we, however, afford to ignore the fact that many teachers feed children endlessly on the "solid, filling" skills, teaching them *how* to *read*, but frequently failing to teach them to *want* to read?

On the other hand can we afford to disregard most of what has been learned about skills development in our eagerness to reap the benefits of the self-selection approach? Completely individualized teaching permits each child only a very few minutes of skills instruction each week. Will this eventually cause the pendulum to swing to the place where children like to read but can do so only in a superficial manner?

In education our pendulum of practice is shoved wildly back and forth because of the tendency of many teachers (especially in colleges) to leap on every flashy bandwagon and crash the cymbals urging all others to follow. They often ignore all research except that which seems to support their biases. Eventually their blunders become apparent to the public when children in the schools experience difficulties. Then we all find ourselves defensively trying to ward off popular panaceas propounded by uninformed but prominent noneducators.

Certainly we must continue the search for more effective methods. But, also, we must test them rigorously before advocating that everybody abandon other proven practices and follow only the new line in teaching.

Research Pointers

Unfortunately many of the people who have done experiments with individualized and basal reading have failed to equate such factors as supply of books, enthusiasm and capability of teachers, and periods of time spent in teaching by each method. Persons who are naive about research methods frequently quote the weak studies with as much conviction as they do the studies that have been more adequately controlled. The carefully controlled research on individualized reading thus far suggests that:[1]

1. Some children, especially the more capable ones, can make progress in self-selected reading programs.
2. Some teachers, especially the more enthusiastic and capable ones, can teach individualized reading successfully.
3. The personal conference between pupil and teacher seems to have motivational value for the child.
4. Most children read more books in a program of self-selection than in basic group instruction, but this does not necessarily result in proportionately greater skills attainment. (In fact, the reading tests used in experiments have usually measured general reading abilities, thus giving us practically no information on various specific skills developed.)
5. Conscientious teachers find it difficult to teach a complete, sequential program of skills and abilities in the limited time available in individual conferences.

It is reassuring that other research, as we all know, has shown that excellent teachers are not limited to only one method in attaining favorable results.[2]

In view of these findings it seems logical to recommend that in the future most teachers should combine programs of basal skills instruction in small groups with a considerable amount of time spent on self-selected reading and individual conferences.[3] Some of the pupil's conferences may be with the teacher and many more may be with other children.

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[1] Harry W. Sartain, "Research on Individualized Reading," *Education Magazine*, 81 (May, 1961), pp. 515-520.

Patrick Groff, "Comparisons of Individualized and Ability Grouping Approaches to Reading Achievement," *Elementary English*, 40 (March, 1963), pp. 258-264, 276.

[2] Wallace Ramsey, "An Evaluation of Three Methods of Teaching Reading," *Challenge and Experiment in Reading* (J. Allen Figurel, editor). International Reading Association Conference Proceedings, 1962, pp. 151-153.

At the same time we should thoroughly re-evaluate the skills introduced through the basal guides, in order to be sure that we are not stealing children's time by teaching some so-called skills that do not make a significant contribution to reading capability. We can have better basal programs, and we can incorporate self-selected reading profitably.

8. Reading Comprehension and Reading Speed: A Discussion of Research

R. BUCHANAN ADAMS

All of us, as teachers, as parents, as adults interested in the intellectual development of our young have heard the imperative, "No, Johnny, you are wrong! Now go back and read it again—SLOWLY!"

The expectation that reading comprehension and reading speed co-exist in a one-to-one relationship is widespread throughout the history of literate mankind. And this expectation makes sense, doesn't it? After all, a listener can't follow a speaker talking at the rate of 500 words per minute. His speech would be garbled. Therefore, it follows, since writing is nothing more than spoken language stored in the "deep freeze" so to speak, writing must be read at a speed equal to the speed at which the author would speak his words.

The Single-Coin Concept

Accordingly, is it not logical to look upon reading speed and reading comprehension as being two sides of the same coin? Since sentences are nothing more than groups of symbols of spoken language, is not reading comprehension the mysterious culmination of the eye busy at work *seeing* the author's words while the mind's ear is busy *hearing* them? This single-coin concept of reading speed and reading comprehension has a venerable heritage rooted in the history of literacy.

When we review that fascinating history of literacy we discover that the reader is so intent, with his mind's ear so busy, that his inner voice becomes in fact the author's proxy voice. The historical truth is that the reader was taught, in order to faithfully grasp the author's intent, to read aloud. Horace, the Latin poet, suggested a distinction between thinking one's own private thoughts and following the thinking of an author's written thoughts. Meditation should be a quiet, contemplative act; reading, on the other hand, according to Horace, should be a physical and spoken act. Indeed, di Capua, the Italian scholar of antiquity, tells us that physicians prescribed reading during ancient times as a physical exercise on a par with walking and running.[1]

Moreover, Dom Leclercq, the Benedictine monk and great medievalist, informs us, ". . . in the Middle Ages, as in antiquity, they read . . . with the lips, pronouncing what they saw, and with the ears, listening to the words pronounced, hearing what is called the 'voices of the pages.' It is a real acoustical reading . . . to pronounce the sacred words in order to retain them . . ."[2]

And so the lessons of history vindicate the teacher for her admonition, "If you don't understand what you read, John, you probably read it too fast." She is merely standing on the shoulders of her predecessors echoing reading instructions handed down through the ages. Reading is reading only if it is understood; the printed word will only be understood if the reading eye speaks distinctly to the mind's ear.

Here then is an answer to the question posed by this session of the IRA Convention: "Is satisfactory comprehension attainable at ultra-high reading speed?" History answers, "NO!"

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[3] Harry W. Sartain, "The Place of Individualized Reading in a Well-Planned Program," *Contributions in Reading No. 28*. Boston: Ginn and Company.

[1] F. di Capua, "Osservazioni sulla lettura e sulla preghiera ad alta voce presso gli antichi," *Rendiconti della Accademia di archeologia*, lettere e belle arti di Napoli, n.s. 28 (1953), pp. 59-62.

[2] Jean Leclercq, *The Love of Learning and the Desire for God*. New York: New American Library—Mentor Omega, 1962, pp. 24-25.

I should emphasize, however, that this historical answer is based upon *a priori* deduction from "natural" principles, the method of pursuing truth which was employed, indeed revered, during the Middle Ages.

A Review of Selected Studies

It was not until the 18th century, with the ushering in of the Age of Enlightenment, that man developed another method by which he could pursue the truth. That method became the scientific method or the process of induction based upon empirical observation. After a careful search of the literature, the earliest scientific curiosity I can find relative to this question of the relationship between reading speed and reading comprehension was entertained a short time before 1883. Hence, the question we are discussing this afternoon did not come under scientific analysis until the late 19th century.

It is interesting to note, too, that the answer came as a scientific discovery and not as a scientific conquest or breakthrough. Professor George Romanes, the Darwinian psychologist of Oxford, was preparing material for his book *Mental Evolution in Animals*. In his chapter on perception he wrote:

> . . . I may briefly allude to some hitherto unpublished observations of my own, which has [sic] served to display a positively astonishing difference between different individuals with respect to the rate at which they are able to read. Of course reading implies enormously intricate processes of perception both of the sensuous and of the intellectual order; but if we choose for these observations persons who have been accustomed to read much, we may consider that they are all very much on a par with respect to the amount of practice which they have had, so that the differences in their rates of reading may fairly be attributed to real differences in their rates of forming complex perceptions in rapid succession, and not to any merely accidental differences arising from greater or less facility acquired by special practice.
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> Now the results of . . . [my experiments] . . . were to show, as I have said, astonishing differences in the *maximum* rate of reading which is possible to different individuals, all of whom have been accustomed to extensive reading. That is to say, the difference may amount to 4 to 1; or, otherwise stated, in a given time one individual may be able to read four times as much as another. Moreover, it appeared that there was no relationship between slowness of reading and power of assimilation; on the contrary, when all the efforts are directed to assimilating as much as possible in a given time, the rapid readers (as shown by their written notes) usually give a better account of the portions of the paragraph which has been compassed by the slow readers than the latter are able to give; and the most rapid reader whom I have found is also the best at assimilating. I should further say that there is no relationship between rapidity of perception as thus tested and intellectual activity as tested by the general results of intellectual work; for I have tried the experiment with several highly distinguished men in science and literature, most of whom I found to be slow readers.[3]

Following Romanes' experiments in London was Abell's work in Boston. In 1894, working independently, Adelaide Abell experimented with 41 Wellesley College students and observed that comprehension may be independent of rate of reading. Her data drove her to conclude that "slowness of reading does not, in spite of common opinion, follow necessarily from closeness of comprehension . . ."[4]

Still another study completed in the 19th century was Quantz's research in which he used 50 University of Wisconsin undergraduates as his experimental population. Publishing under the title of "Problems in the Psychology of Reading," he stated that while his chief concern was rate of reading he wanted also to gain an understanding of some of its underlying contributing factors. Following are three of his conclusions:

1. The visual type of person (i.e., a person who learns best what he can see as opposed to those who learn best through listening) are slightly more rapid readers than the auditory type.
2. Rapid readers not only do their work in less time, but do superior work. They retain more of the substance of what is read or heard than do slow readers.
3. Lip-movement is a serious hin-

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[3] George John Romanes, *Mental Evolution in Animals*, New York: D. Appleton and Co., 1891, pp. 135-137.

[4] Adelaide M. Abell, "Rapid Reading: Advantages and Methods," *Educational Review*, VIII (October, 1894), p. 284.

> drance to speed of reading, and consequently to intelligence of reading.[5]

Let us pause for a moment and review the conclusions of these scientific studies. First of all, they were completed and published before the turn of the 20th century. Therefore, they have been a part of our professional literature for over three generations of scholarship. Second, there is unanimous agreement that the single-coin concept of reading speed and reading comprehension is scientifically unsupportable. Therefore, we are dealing with two independent coins. Third, while all acknowledge the independent nature of the two variables of rate and comprehension, all imply the operation of a third, unknown, intervening variable which must serve to sustain comprehension while reading at a relatively rapid rate.

Some of you at this point may be asking that if the question of reading speed versus reading comprehension was settled by scientific observation before the turn of this century, why is it then that the question is still a burning issue, that the question occupies a prominent place on the program of this annual convention of the International Reading Association?

Others of you may feel that the question as it has been posed today is admissable because of the qualifying adjective "ultrahigh." This is a new encounter, you may feel, and therefore needs to be discussed in light of the recent newspaper and TV talk of ultrahigh reading speed. You may suggest that such super speed reading is a byproduct of the rhythms of our jet-age society.

Nevertheless, the simple fact is that questions of this nature are not settled by sampling professional opinion. These questions are decided only according to the rules of scientific evidence. All the evidence isn't in yet.

What we are talking about is the phenomenon of supernormal reading ability. Is it a fact or a phantom? That is the question. A trend of evidence is developing which suggests we may very well be identifying a distinct human ability which has heretofore gone unnoticed because of scientific skepticism.[6]

Is satisfactory comprehension attainable at ultrahigh speed? Science answers, "It appears to be possible." The evidence is not yet conclusive because we do not have sufficient data at this time to support a firm answer. The National Reading Research Foundation (NaRRF) is pursuing the question right now with a large-scale, ongoing research project. Several schools and colleges are participating with NaRRF in this search for and identification of supernormal readers. Students' reading speed and comprehension have been tested at such schools as Case Institute of Technology, Alma College, Oberlin, and North Olmsted (Ohio) Public Schools; the public schools of Alma, Mich., and Southwestern Central School near Jamestown, N. Y.; Catholic Schools in Dayton, Cincinnati, and Cleveland, Ohio.

NaRRF is attempting to enlarge its pool of adult data because an interesting sidelight seems to be developing. Generalizing from data gathered from a group of adults in Dallas, Texas, government employees in federal service, NaRRF has found that supernormal reading ability seems to be more frequently encountered among our adolescent population than among our adult population. If this generalization should be reinforced by subsequent data, it will imply that there is a distinct period in the growth and development of an individual during which any latent supernormal reading ability must be harvested if it is going to be harvested at all. This implication, if validated by continuing research, will have an impact on the reading curriculum in our schools too staggering to comprehend fully now.

Let me emphasize, however, that all the facts aren't in and we mustn't let wishful thinking fog our vision. Nevertheless, if you are concerned with this question, you will admit the question is much too important for it to be thrown to the passions of controversy. This question is vital to our literate society and therefore demands dignified and thoughtful labor.

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[5] J. O. Quantz, "Problems in the Psychology of Reading," *The Psychological Review Monograph Supplements*, VII, 1897. pp. 49-50.

[6] R. Buchanan Adams, "The Phenomenon of Supernormal Reading Ability," *Twelfth Yearbook of the National Reading Conference*. Milwaukee, Wisconsin: The National Reading Conference, Inc., 1963.

PART III Grant-Sponsored Studies

1. Reading Instruction in the Public Schools of the U. S. A.

Mary C. Austin

DURING the past decade numerous evaluations, some rational and some otherwise, have been made of American reading instruction.

While the results of the studies are reassuring generally, educators and the lay public often lose sight of the fact that such comparisons fail to provide information related to our future needs so that youngsters who will be the nation's leaders in 1980 will be able to cope with the social and political problems of that time. It was in an effort to describe elementary school reading instruction and to make recommendations for its improvement that the second Harvard-Carnegie study was undertaken in 1961-62.

Based upon data obtained from questionnaires from 940 school systems throughout the United States in communities of 10,000 population or more and from interviews and observations in 65 systems in 35 states, the completed report[1] presents findings not only about the teaching of reading but also about a number of related areas which must be strengthened in the decade ahead. This brief overview permits the inclusion of only three areas: instructional methods and materials, provisions for differences, and special services.

Instructional Methods and Materials

Without any doubt, more challenging developmental reading programs should be provided for all children who enter our schools. Because today's readers are growing up in an aerospace age which demands increasing competence, they must learn to read with greater understanding and insight. Obviously, an instructional program appropriate for yesterday will not begin to meet the needs of the future. And yet, in too many classrooms, teachers cling to practices which William S. Gray considered undesirable as long ago as 1937.[2] Prevalent examples include: an overemphasis upon word recognition at the expense of word meanings; comprehension activities which encourage little more than the gathering of facts; oral reading practices which limit enjoyment and appreciation; the neglect of systematic skills development in the intermediate grades; and the superficial treatment of reading and study skills in the content areas. When one considers the deficiencies in teacher preparation reported in *The Torch Lighters,*[3] it is not surprising that these situations prevail. Nor are they difficult to understand when one examines critically the kinds of on-the-job leadership offered in many elementary schools. Moreover, teachers are less knowledgeable than they should be about reading materials and their use in providing more effective instruction.

Basal reading series, and their accompanying manuals and workbooks, continue to serve as the initial thrust into the realm of written language in the nation's schools. These materials are also a major force in the sequential development of reading skills throughout the elementary grades. To produce mature, literate adults, however, a single force cannot be relied upon completely—nor did the authors

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[1] Mary C. Austin and Coleman Morrison, *The First R:* The Harvard Report on Reading in Elementary Schools. New York: The Macmillan Company, 1963.

[2] William S. Gray, *The Teaching of Reading:* A Second Report, 37th Yearbook of the National Society for the Study of Education. Bloomington, Ill.: Public School Publishing Company, 1937, Chapter 1.

[3] Mary C. Austin, Coleman Morrison, et al., *The Torch Lighters:* Tomorrow's Teachers of Reading. Cambridge, Mass.: Harvard Graduate School of Education, 1961.

of basal series design their materials to be the sole tools of instruction. Where they are, as appears to be the practice in many classrooms, the reading program often emerges as an isolated segment of the curriculum, children of widely varying abilities may be deprived of individual attention, and pupils may have too little opportunity to select and enjoy a variety of books. Because basal reading materials dominate the scene, authors and publishers should conduct additional studies to determine whether the content and suggested methodology of their books are appropriate for today's youth.

A re-examination of kindergarten and prereading activities also appears desirable at this time. Although research indicates that such programs make positive contributions to children's ability to read, approximately one fourth of the school systems sampled throughout the United States do not include kindergarten classes. Those systems which do are presently involved in a controversy over whether formal reading instruction beyond prereading activities should be offered to all children, to some of them, or to none.

That all children will benefit from formal reading instruction at a younger age is doubtful, but recent experimentation leads us to believe that we cannot afford to ignore those children who can progress rapidly. On the other hand, we cannot assume the responsibility for irreparable harm which may occur when children are placed too soon in a reading environment.

Provisions for Differences

More than 300 years ago Montaigne claimed that "the most universal quality is diversity." If he were to observe a classroom in action today, he would find his words equally applicable; children differ in many ways, regardless of the rationale for their placement in a certain room. The fact remains, however, that despite the known differences among pupils of a similar age and the great need to adjust instruction accordingly, too few teachers have accomplished this goal.

Almost without exception, provisions for individual differences have incorporated some form of ability grouping. Used as a plan to organize a class into two or three manageable groups, ability grouping is endorsed by most administrators and teachers. Unfortunately, in the absence of modified methods and materials for *children both within and* among groups, this approach represents the *only* attempt to differentiate instruction in many schools. Furthermore, mobility from one group to another is practically nonexistent. To remedy these deficiencies, the three-group pattern of organization for classroom reading instruction should be de-emphasized in favor of flexible grouping which depends upon the nature and purpose of the activities planned.

Improved grouping practices will make possible better teaching, and better teaching is almost certain to increase rather than diminish the range of reading ability in any classroom or group. Thus flexible group practices, while necessary components of a good reading program, cannot do the job alone. In conjunction with them, teachers and administrators must give more than lip service to the philosophy that each child is an individual. Therefore, a truly effective reading program should include the best features of both individualized and group instruction. Certainly, controlled and action research within school systems now and in the future should deal with the inclusion of varying degrees of individualization into the systematic reading program. Only under these conditions will it be possible to determine what combination of approaches will produce the best results.

Special Services

Within the population of every school system there are children whose abilities require special attention, either because they are advanced readers or disabled ones. Many schools fail to identify these pupils before the intermediate grades, however, and even then they often overlook the gifted in favor of those experiencing difficulty.

At present, the major portion of this country's gifted children remain in situations where the regular classroom teacher is responsible for the guidance and development of their unique talents. Frequently she has neither the preparation nor experience which enables her to provide the kind of reading program that will challenge the academically able to the extent of their capacities. As a consequence, when "enrichment" programs are offered to advanced readers, they usually include greater quantities of the same activities in which their classmates are engaged.

Apparently more successful are those programs which group able readers together for special reading instruction with a special teacher. In systems which make such adjustments, one of two procedures is often followed. Either the gifted leave their regular classrooms for instruction within the same building, or they are transported to centers where they receive all or part of their education. Although the pressing problems of selecting pupils who will profit most from special instruction, of designing a curriculum with appropriately stimulating content, and of securing "gifted" teachers have not been solved entirely, many school systems are attempting to improve their opportunities for the talented.

Whereas pupils with reading difficulties are less often neglected than the gifted, the attention devoted to them is seldom deemed highly satisfactory. This is particularly true in view of the fact that the two services most commonly provided for them are group and individual instruction by the classroom teacher who, more often than not, finds herself confronted with the responsibility of undertaking a program of remedial instruction without the advantage of specialized training. Because the process of identifying, diagnosing, and correcting reading disabilities is such a demanding one, only those with proper educational backgrounds should be expected to assume this major role. On the other hand it comes as no surprise to anyone that the classroom teacher must undertake this task, since slightly more than one third of the school systems sampled reported the employment of special teachers to work with underachievers.

Even in systems which offer special programs for handicapped readers, remedial teachers do not always possess appropriate qualifications. Their effectiveness is further limited by the lack of sufficiently helpful supervision and the absence of rapport and coordination of efforts between special reading teachers and those in classrooms.

A Look Ahead

A Chinese proverb states that a journey of a thousand miles must begin with a single step. In the Sixties the improvement of reading instruction represents the most essential single step toward educational progress and quality.

For your consideration and reaction, therefore, 45 recommendations have been formulated in the Harvard report on reading in elementary schools. They concern those areas of administration and continuing professional education which relate directly to the teaching of reading, as well as those which pertain to selected aspects of the instructional program. In situations where any or several of the recommendations is found applicable, we hope it will be implemented after its thorough discussion by teachers and administrators rather than by central office edict. Knowing that instructional improvements depend upon the combined changes in individuals, we also hope that teachers and administrators will neither fear to change their programs nor to make changes out of fear.

2. Reading Research and Its Communication: The Columbia-Carnegie Project

ALLEN H. BARTON

The aims of this project were set forth in "The Sociology of Reading Research," (Teachers College Record, November, 1961). They are generally to study the problems raised by the application of scientific research to education in the field of reading. These problems involve a great many different groups or roles within the educational world.

We have looked at:
- —the research itself
- —the people who do the research
- —communications about reading (texts, articles, manuals, etc.)
- —communications behavior of researchers, people who give courses

on reading, administrators, and teachers

—beliefs and practices concerning reading instruction of researchers, people who give courses on reading, administrators and teachers

—and in a very crude way, the performance of the children in about 1,500 classrooms

1. The Research Itself

Reading research needs to be "longer, wider, and deeper." I would like to indicate one line which might be followed, which derives from some very crude data we obtained through our survey of 1,500 teachers across the nation. Almost incidentally to our main purpose of studying opinions, reported practices, and communications behavior, we asked the teachers some questions about their classes: the average reading level (and highest and lowest students), the occupational and income background of the students, the size of the community, and the class size. The reports on average reading level are based on a number of different tests, not all given quite at the same time, and subject to various problems of reporting. I would not like to claim they are fully accurate and comparable. The same is true of the information on students' socio-economic background.

But the sheer fact of having information on 1,500 classrooms permits certain kinds of analysis which are common in survey research, but relatively rare in reading research as usually practiced. Last year we reported some striking findings in regard to socio-economic class and reading achievement. (These are reproduced in my paper "Social Class and Instructional Procedures in the Process of Learning to Read," prepared for the National Reading Conference at the University of Virginia last December.) The gist of these findings is that the norm for upper middle-class children is a year ahead of "grade level," from the end of first grade on; while the norm for lower working-class children (the poorer and more culturally deprived part of the working class) is to fall back until they are a year or more behind by the time they reach fourth and fifth grade. We have looked into these findings further, introducing two more sociological variables—community size and class size.

The effect of socio-economic class is still the most striking single feature. It remains even when we control for the fact that working-class children are more often in large cities, and in large classes.

But we can also see that the working-class children do notably better in the small communities, under 10,000. What is there about small communities which has the effect of moderating the influence of social background on reading?

Further, we can see that class size appears to make a difference—but that this is much greater for middle-class children, and in communities smaller than 100,000. Why is this? We have other data, incidentally, which show that better facilities usually benefit those who are better off to start with; this suggests how difficult it is to try to compensate for poor home background by the usual kinds of school facilities.

I mention these figures not so much for their own sake as to indicate what can be done with data "in breadth"—covering a wide range of types of communities, children, and classrooms, with such a large number of cases that we can use multivariate analysis to isolate the effects of several variables simultaneously. A "National Reading Survey," getting reading scores on some standard battery of tests plus family, school, and community characteristics, from say 200 schools, 2,000 classrooms, would at this stage be immensely useful in assessing the influence of social and school characteristics on reading. With data on three levels—individual students, classrooms, and communities—some very revealing analysis could be done of the interaction of individual characteristics with social context in influencing reading.

Such a survey might form the baseline for making reading research "longer" also—by following up the same classes over a period of years.

Such a longitudinal study would be most useful if accompanied by efforts to make the research "deeper" by *breaking down* the variables of "reading ability" on the one hand and "social factors" on the other into a set of variables which could be analyzed as a system.

What is it about being upper middle class which helps so much, and about being lower working class which hinders so much? Is it the presence of large amounts of reading matter, parents reading to the children, and parental example, in upper middle-class homes? Other studies suggest that it is; but how much effect remains when these are taken into account? Does class background have a motivational effect regardless of these direct aids to reading? How much reading do children of various social classes do outside of school? If the amount of reading done outside of school by upper middle-class children is of an order which dwarfs the amount of in-school reading—two, three, five, or ten times as much—then we may have one link in the chain which produces such major class differences. Likewise there may be interaction between the size of the initial listening vocabulary of children, their development of phonetic word attack skills, the growth of their reading vocabularies, and the amount of outside reading they do, with vocabulary size and word-attack skills facilitating reading and reading facilitating skills, in a "feedback" relationship.

A very useful type of study therefore would be to measure such variables in a fairly large sample of children once or twice a year for several years, and apply the kinds of analysis which public opinion researchers call "panel analysis." The variables measured might include:

—size of listening vocabulary
—symbol-discriminating ability
—size of sight vocabulary
—phonetic and structural word-attack skills
—speed and comprehension in reading
—motivation to read
—amount of reading done in and out of school

We might then have the basis of answering practical policy questions about the optimum methods of instruction and types of school materials to employ with various kinds of children at various times. Does the timing, amount, and type of phonetic training have to be different for children of different home backgrounds? Should formal reading instruction begin at different times? How much and what kind of "readiness training" is needed for children of different backgrounds?

The development of a multivariate system model over time, analyzing the various paths to development of reading skills which different children take, and the interaction of family behavior, school practices, reading skills, reading motivation, and amount of reading, would lead us toward a *theory* of learning to read. Such a theory is sorely needed, because of the tendency of past researchers to leap from a single correlation or single experimental finding straight to a policy recommendation, without trying to fit the relationship into any system.

—If skilled readers are found to read groups of words at a glance, then beginning readers should be trained to read groups of words at a glance. (But perhaps different methods are needed at different phases?)
—If skilled readers are found to have a high degree of phonetic word-attack skill, then beginning readers should be trained in phonetics. (But what came first in the skilled readers?)
—If skilled readers have a large vocabulary, then beginning readers should be given vocabulary training.
—If children can learn to read several hundred words as whole-word patterns without phonetic analysis, then learning of phonetic word attack must be a waste of time.

What is wrong with this kind of "two-variable, one-time" analysis is that it does not consider the development of reading ability as a complex, multivariate process over time. Now people have been saying that "development of reading ability is a complex process" for a long time; but I mean something quite specific and quantifiable by this, and I suggest that we have research techniques to analyze this process, if we would only use them.

2. Communications and Communication Behavior

In addition to looking at the research itself, we have been looking at the content of communications about reading instruction, to get an idea of the problems of communicating scientifically based advice to the practicing profession. I will say nothing about our efforts along these lines now because they are very incomplete. It does appear however from an analysis of manuals, texts on reading instruction, introductions to readers, and similar advice to teachers over the last 150 years, that almost all of the issues raised in the last ten years were being raised long before there was any such thing as educational research. And some of the stereotyped versions of the history of reading instruction in America (from the Alphabet method to elaborate Phonics methods to pure Whole-word methods and back to Mixed methods, is one version) are grossly oversimplified.

Concerning the communications behavior of the various participants in the system, we are now getting some descriptive data out of our surveys of reading researchers, people who teach reading instruction, principals, and teachers.

How often do you talk about problems of teaching reading with various categories of people? These facts are striking:

—The researchers who teach courses on reading also are communicating frequently with almost everybody. (This may be one reason why only 23 per cent of them can spend as much as one fifth of their time on research!)

—The teachers main contact concerning teaching reading is with other teachers. (And the school reading specialists play little part in talking with teachers on the subject—partly because there are so few full-time reading specialists in the schools.)

—The elementary school principals do not have very frequent discussions of reading with people other than their own teachers.

How important have various sources been in influencing beliefs regarding the teaching of reading? It is notable that "the reading series used in the school" ranks first with the teachers, and fairly high with the principals. In line with Mary Austin's findings, practice-teaching ranks notably higher as an influence than undergraduate courses for the teachers. Reading books and articles on reading is high for both teachers and principals; "reading reports of specific research studies" is important to less than one third of the teachers, and to just under one half of the principals. This suggests that the effect of research on teachers is largely indirect, through the people who write teachers' manuals and books and articles, and through the principal if he is one of the half who reads research articles. The role of these mediators and interpreters of research will be subject to further investigation in our analysis. Finally, it is worth reporting that principals rank learning from their teachers as a quite important source of influence—indeed, rather more important than teachers say the advice of their principals is.

3. Opinions and Practices

The immediate output of the communications system in education should have some effect on beliefs and practices. Last year I noted that our analysis of reported practices and opinions found a very great uniformity, throughout the country, among all types of teachers and principals. This is not surprising considering how important the reading series and their manuals are in forming opinions; the country is blanketed by relatively few series, and they are all fundamentally very similar in approach.

On some items we find a very high consensus between our sample of reading experts, the elementary school principals, and elementary school teachers. Almost everyone is agreed that some children should start reading instruction before age 6, and that others should not start until age 7.

There is also a very large majority for the present approach to teaching phonetics in connection with words as they appear in reading, rather than separate periods and exercises, although here a minority favoring more systematic phonetic training exists, and, among the experts, a minority favoring minimum phonetics.

All is not in complete harmony, however. On some items there is considerable disagreement. Over 60 per cent of the teachers find the basal reading series "absolutely essential" for teaching reading; only 40 per cent of principals, and 28 per cent of the experts, consider them essential, although over three fourths consider them at least very important.

The experts, by contrast, are more likely to consider a varied classroom library essential; although here again it is a matter of priority, since over 90 per cent of all groups consider it at least very important.

About 60 per cent of the teachers find graded workbooks very important or essential, contrasted with 40 per cent of the principals and 32 per cent of the experts. This suggests not so much a failure of communication from experts to teachers as a difference in objectives: the teachers must cope with large classes of children every day, and the workbook gives them something to do, especially since most classes have two or three reading groups with which she works in turn. The experts have not so far come up with a technology for handling this situation, so their disapproval of the workbooks is not likely to influence the teachers.

Finally, we have two very suggestive differences in attitude. The teachers overwhelmingly agree that the suggestions to teachers found in reading manuals are based on "definite scientific proof"—hardly any teachers disagree. The experts (as we have defined them) are much less impressed by the scientific status of reading manuals; almost half disagree that they are based on "definite scientific proof," compared with a third who agree (mostly). The experts thus think much less highly of their own product, in a sense; perhaps the teachers have been oversold.

If the experts are much more critical of themselves, they are also much more critical of the teachers. Almost 80 per cent of the elementary school teachers strongly agree that "elementary school teaching is a profession, like law or engineering," compared with about 60 per cent of the principals, and only 37 per cent of the reading experts. To be sure, a large majority of experts agree to some extent—but they have qualifications. Now most of the reading experts are involved in training teachers; so this failure to agree completely on their professionalism is in considerable part a criticism of their own educational products.

This leads to an interesting contradiction: the teachers think they are professionals, but want to rely on basal readers, graded workbooks, teachers' manuals, and other materials prefabricated by the experts. The experts don't think the teachers are fully of professional status, but they want the teachers to rely less on basal readers and workbooks and more on a wide range of children's books, and presumably more individualized approaches. How do they propose to resolve this contradiction?

We have presented these scattered figures on communications and opinion more to illustrate the kind of analysis we are attempting—an examination of flows of information and ideas within a complex social system, and a comparison of opinions and beliefs between the various participants in the system—the producers of scientific knowledge, the "wholesalers" who embody it in books, articles, readers, and teacher-training courses, the "retailers" who apply this knowledge as administrators of local schools and as teachers. The ultimate consumers are the children. This leads us back to our earlier examination of the children's reading performance reported by the teachers on our survey, and the difficulties which we find in achieving an effective system of mass education for all ability levels and all socio-economic groups.

It is the hope of our study that we will suggest both ways to improve the reading research itself, and ways to improve the dissemination of research-based knowledge.

3. Different Approaches to Beginning Reading

JEANNE CHALL

Since February, 1962, I have been engaged in a study of different approaches to beginning reading. The study is scheduled to continue through February, 1964, and although we have made good inroads into the collection of data, we are at that point where more has to be done than has been done. Therefore, the major findings will have to wait for a much later date. I will present, however, a rough outline of what we have been doing.

In essence, our study, which is supported by the Carnegie Corporation, with the cooperation of The City College of New York, is concerned with the controversy in beginning reading that has been raging quite steadily for nearly ten years. We are looking into the claims and counterclaims made for different approaches to beginning reading with the hope that some basic underlying issues will be uncovered. Hopefully this will take the problem of beginning reading methods out of the realm of heated debate, into the area of objective study.

Despite the thousands of research studies and discussions on reading since the turn of the century, it has been difficult for researchers to state with any degree of confidence that one particular method or approach to beginning reading is indeed better than another.

Such a period of disagreement and debate began in 1955 in the United States, with the publication of Rudolf Flesch's *Why Johnny Can't Read*. As you well remember, this book literally "took us by storm." It stayed on the best-seller lists for over 30 weeks and was serialized in many newspapers. More important, it challenged, strongly, clearly, and not without anger, the prevailing views on beginning reading, by calling for a return to a phonic approach as "the best," no, the *only* method by which Johnny should begin. Flesch's support for such a view was his interpretation of the reading research, particularly the experimental research comparing different methods. Interestingly enough this is the same research on which the prevailing eclectic methods were based.

England saw the beginnings of its reading controversy at about the same time, with the experimental reports of Daniels and Diack. They also concluded that their newly devised phonic-word approach produced better results than the prevailing mixed methods then in use.

More recently, linguistic scientists following the early lead of Leonard Bloomfield,[1] have called for reforms in beginning reading instruction. With some variations, they have recommended early introduction and mastery of the alphabetic principle through vocabulary control based on consistent phoneme-grapheme patterns.

Within the field of reading itself, there have been heated debates since the 1950's over individualized reading. The individualized reading proponents claim that the use of a variety of materials (mainly interesting trade books) and individual teacher-pupil conferences result in better achievement and more lasting interests than the prevailing approach based on within-class groups using basal readers.

Other approaches have been proposed to challenge the prevailing views, but only a few can be mentioned here: Van Allen's Language-Experience Approach, where children's own creative writing is used as a vehicle for learning how to read, write, and spell; Spalding's approach based on an early start through systematic training in writing, spelling, and phonics; Richards and Gibson's specially devised materials based on a limited introduction of letters and language patterns; Mae Carden's language program with its heavy emphasis on phonics; the special systematic phonics programs that have been suggested as supplements to, or foundations for, the regular basal readers—the Hay-Wingo system, *Phonetic Keys to Reading*, *Breaking the Sound Barrier*, *Phono-visual*, etc.; the Augmented Roman Alphabet, which proposes that the child begin his reading with a "more sensible" alphabet; and of course, the most dramatic of all, O. K. Moore's demonstrations that two- and three-year-olds can learn to read with the aid of an electric typewriter, although there is an impressively sophisticated behavioral science theory behind this.

At a special conference of the National Conference on Research in English, Committee on Reading, sponsored by the Carnegie Corporation in 1959, the problem of beginning reading was considered one of major importance for research. A subcommittee composed of Ralph Staiger, now Executive Secretary of the IRA, James Soffietti, linguist at Syracuse University, and the present writer believed that large-scale cooperative experimentation was essential to determine whether some approaches are indeed better or worse than others. To guide such large-scale experimentation, a paradigm of *Variables Which Influence Research on Success in Beginning Reading* was proposed and accepted by the entire Research Committee as a fruitful schema for approaching the problem.

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[1] Bloomfield suggested reforms as early as the 1930's and two articles on his views were published in *Elementary English* in 1942.

The following year, at the University of Chicago, the same committee met, refined the schema, and suggested that individuals through their institutions, submit proposals for large-scale cooperative experiments to compare systematically the different approaches. The plan was to have a series of longitudinal studies, beginning in kindergarten or first grade, and running through the sixth grade.

It was the belief of this writer that if the schema had merit, it could be used as a basis for a critical analysis of the already existing research. This is in essence what I proposed to the Carnegie Corporation in 1961 and it was accepted.

The City College-Carnegie Reading Study

Our study, then, is primarily concerned with a critical analysis of the experimental literature on beginning reading methods. Such a critical analysis, we believed, would help salvage whatever we *do know*, and point up what we *don't know*. Since research should, in its best sense, be cumulative, we hoped that a detailed critical analysis and synthesis of the findings would help the future experimenters design more crucial studies.

In addition, we planned to survey the correlational studies on factors in success in beginning reading, and some of the classic studies of reading disability, to see whether we could possibly relate specific kinds of reading problems to the methods used.

A second aspect of our study is concerned with the development of a model to describe the different approaches to beginning reading. One of the real difficulties in testing the effectiveness of any method is the lack of clarity with regard to what that method includes or excludes. Considerable time, energy, and money are often spent in "experimenting" with a "new" method, when a careful analysis of the "new" method would indicate that it is quite similar to a method widely used in the past, fairly well researched, and long since discarded.

Let me give you some examples. Two approaches that have been widely debated recently are the individualized and basal reader approaches. True, these approaches are quite different when we consider choice of materials and pacing. But, they are quite similar in that both start with readiness, then proceed with an initial sight vocabulary, which is later supplemented by word-analysis techniques.

Another example would be a comparison of the "linguistic approach" (as presented in the Bloomfield-Barnhart, *Let's Read*) with the approach used in the most widely used basal readers. Both accept the word as the primary unit to be learned. Both, also, accept the principle of vocabulary control. However, the words that are "controlled" are quite different. Bloomfield controlled words for the regularity of their sound-symbol relations. Therefore the Johnny who learns to read by Bloomfield reads about *Dan, Nan, fan,* and *can,* and he soon reads that "Dan can fan Nan." The basal readers control their words on a meaning-frequency-repetition principle. Thus, the Johnny who learns from a basal reader meets such words as *look, come, go,* and *see.* And he soon reads that "Mac sees Muff" or "Ted sees Sally." For neither one of these programs is writing crucial.

Some approaches rely heavily on writing, while others have the children do no writing at all, except perhaps to circle or underline a word. Some expect the child's motivation for learning to come from the content (stories and pictures), while others accept the fact that the content for beginners is of necessity dull, and therefore rely on the child's desire to master the reading "trick." Some give emphasis to "reading for meaning" and "critical interpretation" right from the start, others emphasize learning the code first, with meaning and interpretation coming after a sufficient facility with the code has been established.

We thought, therefore, that a better clarification of method would lead not only to the design of more analytic studies, but would also perhaps aid us in the understanding of the process of learning to read. Hopefully, such a clarification might lead us back to the psychology of learning, from which the earlier experimenters in reading received their impetus.

A third aspect of our study involved interviewing leading proponents of various approaches, observing these approaches in schools suggested by them, analyzing achievement records, and talking with administrators and teachers.

Preliminary Impressions

We present the following only as tentative impressions, which the full report will amplify and, modify.

Our analysis of the literature so far has confirmed what in a sense was to be expected. There were practically no studies that would meet strict experimental criteria. The different methods compared were so poorly defined and described, and were in most instances so similar, that it will be difficult to interpret the findings with any degree of certainty.

Except for a few early studies, most of them were narrowly conceived, with no attempt to anchor their hypotheses in a theory of learning or of the reading process. A discouraging note is that the more recent studies, although they use more elaborate statistical tools, appear to be even more narrowly conceived than those reported in the 1930's. Although the findings have been used to justify the use of a given "method" because an alternate "method" produced more reading problems, practically none of the investigations paid any attention to the range of reading achievement and to the quantity and quality of reading problems produced.

Many of the studies convey the impression that the motivation for the experimentation was not so much a concern with the actual efficacy of a particular method, but an attempt to confirm the validity of a particular method that was already in use in a particular school system at a particular time.

In other words, *most* of the investigators—*not all*—asked the wrong questions. Instead of asking what effects different methods had on different kinds of children, under given circumstances, when used by given teachers, etc., they asked only—Which is better? If they found one significantly better than another, they seldom asked why.

Along with this were underlying assumptions regarding goals of reading instruction and the process of reading which were seldom made explicit. We are attempting to relate, if possible, some of these underlying assumptions to the findings and conclusions of the experiments and to the prevailing educational philosophy and psychology at the particular time of the experiment. That these underlying assumptions must be taken into account was made evident by the fact that some experimenters appeared to draw conclusions and educational implications from their experiments that were not warranted by their own findings.

Visits to schools to observe classes using different approaches have confirmed what has been observed by others: what an author specifies as the correct procedure for his method, what teachers and administrators say they do, and what one actually finds being done in the classroom are not always in agreement.

For almost every approach, we found teachers violating some of the precepts that the authors claim as a special feature of their system. Too often, also, they are the very things that the authors give in their "theory" as the pitfalls of other methods against which they propose their own. This emphasizes the necessity for objective observations by "outsiders" in large-scale controlled experimentation.

In schools using one of the "newer approaches," there appeared to be high morale and what we have termed the "self-created" Hawthorne effect. Administrators and teachers in these schools are convinced that they have the answer. They claim excellent results, although, when asked for objective evidence, one finds that they have been quite remiss in collecting such evidence. However, some schools have kept good records and have made these available to us for study.

Teachers and administrators following the newer approaches are quite critical of the prevailing view (the basal reader, or eclectic approach in the U. S.; the mixed methods approach in England). At the same time that they openly criticize the prevailing view, and the "reading experts" and "teachers' college professors" who hold such views, they feel unjustly misunderstood, criticized, and misinterpreted by them.

In general, I found emotion where reason should prevail. There appeared to be such a need to defend what one was doing that it was difficult for each to see in what respects his approach was similar to another and in what respects it was different. Generally, those using the "newer approaches" appear to be aware only of the one special feature that they have added, or changed. They fail, at the same time, to see that they are incorporating many other features that are recommended by the "reading experts" and "teachers' college professors" and that the better results they seem to be getting may stem from these other features. Those who have adopted one of the "newer" approaches are also, as a group, unaware of or quite hostile to other "new" approaches that differ from their own only in minor respects.

The parochialism and emotional involvement with a particular approach raises some fundamental questions regarding the possibility of "objective" reporting by those directly involved in the outcomes of experimentation. The emotional involvement is really not all negative. The positive effects are the greater intensity of work and the general improvement of the total reading program by those who are trying to make a point that their particular approach is the best. In the long run, the children probably benefit from this "self-created" Hawthorne effect. But, for science and for understanding, such a situation has serious limitations, unless, of course, the Hawthorne effect is itself the most essential variable.

In general, I found a trend away from the prevailing "eclectic" approach to beginning reading. I found a trend, especially in the United States, toward programs that stress systematic teaching of the sound-symbol relationships, whether through special phonics programs or through a "linguistic approach." This trend is also accompanied by changes in classroom organization (ability grouping of pupils, and more whole class teaching), higher achievement expectations (with ceilings being raised on the difficulty of books used in the early grades), an earlier start of formal reading instruction (in many schools in the United States, as early as the beginning of kindergarten), a general emphasis on subject matter learnings, and greater formality and system in teaching the content subjects. At the same time, there appears to be a reverse trend, as exemplified by the Language-Experience Approach and Individualized Reading, which stress greater informality and freedom of choice of reading materials by the children and teacher. This latter trend is, I believe, less pronounced than the former, and is being incorporated as an aspect of the more structured programs.

In England and Scotland, where the controversy has not been as heated as in the United States and where schools have traditionally had a choice of following either a sight or phonic approach (the teacher manuals to their reading schemes [basal reading series] give separate instructions for "sight" teacher and "phonic" teachers), the trend toward systematic phonics does not seem to be as strong. But, there too, most of the experimentation has been motivated by dissatisfaction with the acquisition of the alphabetic principle.

The interviews of leading proponents of various methods have been especially valuable in revealing underlying assumptions, not always made explicit, in the definitions and goals of reading held by different people. Linguists and those who call for more systematic phonic programs tend to see the task of beginning reading as mastering a code (sound-symbol relations) while those within the prevailing view (including the proponents of individualized reading) tend to see the beginning steps in reading essentially as a miniature replica of the reading engaged in by adults. They tend to stress the importance of content, interpretation, and meaning from the start. However, all proponents see the end product of reading as one of getting meaning and interpreting what is read. This difference in the definition of beginning reading may help explain the emphases stressed by each and some of the emotion that has been expended in the debate.

4. University of Pittsburgh—Buhl Foundation Project: Teaching French in the Elementary School

J. ALLEN FIGUREL

The United States has become a leader of free peoples everywhere. One of the effects of this leadership has been an increased interest in other peoples and their languages. It is common knowledge that one of the important outcomes of studying a foreign language is the development of a positive attitude toward people who speak another language. For this and related reasons our government has been encouraging the study of foreign language through funds appropriated through the National Defense Education Act. Although the growth of foreign language teaching was very rapid after World War II, it has become phenominal since the passage of the Act. In 1941, fewer than 5,000 children were exposed to a second language in the elementary school. In 1952, 87 communities had such a program. By 1956, 357 cities and towns in 44 states reported foreign language programs. The NDEA has helped to catapult the total number of elementary school children studying FLES to nearly a million and the momentum is picking up speed with each new school team. Even with this pickup we are still behind the Soviet Union in this respect. The Soviets have 3,500,000 pupils studying English. In fact, the Soviets use the studying of English as a propaganda weapon. By the time Russian pupils are in the eighth year, they are expected to have half of their course work in English.

A foreign language is best taught, according to experts, if it is considered as a second language in the whole school. This report is an attempt to report briefly on the teaching of French (understanding, response, reading, and writing) as a second language in the Pittsburgh area.

In 1957, funds were sought from the Buhl Foundation and the participating school districts for a plan of teaching French in certain elementary schools in the Pittsburgh district. The plan was approved by four participating school districts: Pittsburgh, Forest Hills, O'Hara Township, and Falk Laboratory School of the University of Pittsburgh.

The Plan of the Project

The plan was to be a three-year program (reading readiness) featuring continuous in-service training and counseling with the "self-contained" classroom teachers. When it was seen that very little in acquiring a second language could be expected in so short a time, the project was extended to six years. Initially, it was estimated that 1,800 pupils would participate in the program. With the extension, the number of pupils increased to 3,000.

The first phase of the work was concerned with getting teachers ready to participate in the project. The program was to be divided into three phases:

1. A summer workshop.
2. A continuation of the workshop during the school term.
3. Biweekly sessions in the schools.

The project was under the direction of the Department of Modern Languages of the University of Pittsburgh. The Department provided the director of the project and two consultants whose duties were to supervise the programs in the schools. An educational consultant participated in all activities. In addition to conducting the in-service program, consultants visit the classrooms regularly.

The Method Used

Teaching techniques reflect the objectives of a program. Learning language in childhood is largely imitative. Learning a second language is no different from learning the first one. Hearing and speaking, or recognition and imitation, afford direct experience and enjoyment in communicating ideas. For these reasons the aural-oral or, as many prefer to call it, the audio-lingual approach was used. The sessions comprised both formal presentations and incidental teaching throughout the school day. Because reading and writing should come only after a child has acquired an oral understanding of the basic words and phrases of the language, reading was not started until the child had had three or four years of reading readiness activities.

Materials of Instruction

A special manual[1] was prepared by the two consultants for the use of teachers. The book was written to provide for the teacher a simple, everyday plan for the introduction of French to her pupils regardless of grade level. The manual is for obvious reasons object centered. The book begins with objects within the child's range of vision and everyday use. The book repeats the use of the words and phrases learned so that the expressions become the child's living vocabulary. The lessons are organized into 30 weekly lessons. Additional lessons are provided for those who complete the 30 lessons.

After the third year of the project the need arose for a second manual.[2] The second manual is organized on the same plan as the first. The objectives of the second book cover the extension of the noun-centered vocabulary and the functional use of many grammatical principles in everyday conversational French. This facilitates the transition to French grammar later. The second book also develops in the children a sense of adaptability and spontaneity in using the spoken dialogue. There is also an attempt in this book to develop pupil-pupil conversations rather than the teacher-pupil ones which predominated the first book. There are 18 units in the publication in addition to a supplement for the teacher.

There are no good French readers for American elementary children. The best available is *Petites Conversations* by Julian Harris and Hélène Monod-Cassidy. The reader is used in the sixth grade.

Both manuals are on tapes so that teachers may play practice sessions for themselves or their pupils.

Objects of various kinds were provided as was drawing, paper, baskets, etc. The list rests with the ingenuity of the teacher.

Outcomes of the Project

No formal evaluation was made at the end of the first year. However, all the rooms were visited by the director of the project, who himself is an expert in the teaching of French. Evidence acquired from his visits indicated that the teachers performed well in learning and in teaching. The "little by little" French contained in the project's manual were in most cases, those that could be overcome.

The Committee decided that all formal evaluations should be undertaken by outside specialists. As the result of this decision, Dr. Blair Hanson, Chairman of the Modern Languages Department of Allegheny College was asked to undertake the evaluations for the second year and each successive year.

The evaluation made at the close of the second year was to find out to what extent an in-service program had succeeded. Could large numbers of classroom teachers, not previously prepared to teach French, be instructed well enough by specialists through in-service training programs so that they could successfully teach French to their pupils in self-contained classrooms? [illegible] evaluation was made to include:

1. Teacher preparedness
2. Teacher morale
   phrases and sentences orally
3. Children's ability to use French

Questionnaires were used to measure the first two phases of the evaluation. Sixty-one of the 63 teachers returned the questionnaires. Of these, half of them had participated in at least one workshop and over half of them had attended some of the one-day institutes. All of them, of course, attended regularly the biweekly practice sessions in their own schools. Seventeen of them had no formal training in French other than that acquired in the project. Thirty-four teachers had studied French in high school. One had spent a summer at Middlebury College French School; one had lived in a French dormitory; and five had taken extra courses since entering the project. Eleven persons had gone to France and 44 had studied another language.

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[1] Jack Kolbert and Harry Goldby. *A First French Handbook for Teachers in Elementary Schools.* University of Pittsburgh Press, 1958.

[2] Jack Kolbert and Harry Goldby. *A Second French Handbook for Teachers in Elementary Schools.* University of Pittsburgh Press, 1960.

A second questionnaire measured the "consent factors" of the participating teachers. Fifty-nine teachers returned this second questionnaire. Teachers gave an overwhelming vote of confidence to the two consultants and were enthusiastic about the project.

Pupils usually reflect the enthusiasm of their teachers. Thirty-two considered their pupils to be enthusiastic; 21 as warm; five as lukewarm; and one as cold.

Thirty-four teachers described the parents' response as enthusiastic; 18 as warm, six as lukewarm; one said she did not know.

From the consultants' points of view, 63 per cent of the principals were enthusiastic and 37 per cent cooperative. According to them, 53 per cent of the teachers were enthusiastic, 32 per cent cooperative, and 15 per cent indifferent. The consultants reported 50 per cent of the pupils as enthusiastic, 35 per cent as cooperative, ten per cent indifferent, and five per cent possibly hostile to the project.

One of the things that impressed the evaluator during her visits to the schools was the combination of quiet pride in what they had achieved in so short a time and genuine humility in what they had not accomplished.

A special oral test was devised for use with pupils. Each child was scored in three areas: understanding, response (reply), and pronunciation. The scale used had five points (1 to 5) representing excellent, very good, good, fair, and poor.

Three pupils were tested from each room, ranging in ability from high to low. Of the 198 pupils tested, 84 received a *1* in understanding, 26 in response, and 47 in pronunciation. This is 26.45 per cent of the total.

Twenty-eight received a *2* in understanding, 9 in response, and 55 in pronunciation. Only 5.72 per cent of the total rated a *5* in the three categories. The over-all accomplishment can be said to be above average, which is very good. The evaluator had expected it to be much less accurate. When one considers that the lowest scores were made by first graders who had only one year of training, the accomplishment may be said to be gratifying.

In the total picture, the very superior children do better than others in achieving *1* scores. But the percentage remains fairly steady in six of seven brackets where 2 and 3 scores are received. It is dangerous to generalize from so few scores, but it does seem safe to say that the results confirm the feeling of 75 per cent of the teachers who indicated that they would *not* wish French lessons to be limited to above-average children.

According to the evaluator, the French Project is nothing less than heroic. The time and patience demanded of all who take part in it is phenomenal. While there are still obvious weak spots, much good has come from the project.

The Third Year of the Project

Tests along similar lines as for the second year were administered by Dr. Hanson. Scoring was the same. Three hundred and eight pupils were tested this time, approximately 10 per cent of the total. Selectees again were from each of the upper third, middle third, and lower third of the class.

One hundred and thirty-six pupils scored *1* in understanding, 48 in responses, and 136 in pronunciation. This comprised 34.63 per cent of the total. Sixty scored *2* in understanding, 19 in response, and 98 in pronunciation. This makes a total of 53.79 per cent who received the two top scores. No one scored a *5* in understanding or pronunciation and only five scored at this low level in response. The average score in understanding was 1.98, in response 2.81, and in pronunciation 1.83. The average for the entire group was 2.21. One must remember that in these scores there were children who had only one year of French and some only two years. These were the first and second graders.

Project Extended to Sixth Grade

During 1960-61, the French Project expanded to include the sixth grade. At this level the Project aimed to continue the development of oral communication skills in the pupils' use of French, and also to begin the transition to oral and silent reading. Teaching reading in a first language is difficult in itself. How difficult is the reading of a second language if it is taught in most cases by teachers with a limited French background? The reading textbook used was *Petites Conversations* by Julian Harris and Hélène Monod-Cassidy.

The evaluation at the end of the fourth year included seven parts: (1) a questionnaire for the teachers concerning the make-up and conduct of their classes, (2) a visit by the evaluator to the classrooms, (3) a reading comprehension test, (4) a tape-recording of each child's reading, (5) a listening comprehension test, (6) a *dictée*, and (7) an individual conversation test for 12 children from each room. The *dictée* was dropped from the testing because teachers felt that their pupils had too little practice in writing. Twelve sixth-grade rooms participated in this testing.

The questionnaire revealed that the teachers constituted a group of persons inexperienced in French except for the training they received in connection with the Project. Six classes had mixed ability groups. Two classes had studied French for three years, three for four years and five for five years. The amount of time spent on French varied with the wishes of the teachers. Four teachers out of the nine replying to the questionnaire said there was coordination in curriculum planning among the teachers of French in their schools. Six teachers felt that French was an integral part of the curriculum. All prepared their own lesson plans; also they themselves used some English during the French class, either for giving directions or filling in when their own French vocabulary failed them. One reported that she spent 75 per cent of the French class on reading; one spent 60 per cent; five spent 50 per cent; and two, 12 per cent. Five teachers had their pupils do some writing.

In four of the 12 classes, only listening and speaking skills were in evidence. In one class only oral reading and reading translation were demonstrated although the teachers were told not to use translation as a technique. In seven classes teachers included in their "typical" classes demonstrations of listening, speaking, and oral reading skills. Very few complied with the evaluator's request and so it was not possible to comment about teaching techniques.

Out of 12 classes, five teachers and seven classes used no English during the evaluator's visit. Two teachers used a little English and two teachers used a great deal. In 11 classes, the pace was rapid and effective. In one it was very slow.

Looking over the classes as a whole, the evaluator found two general weaknesses: the amount of translation called for in the reading lesson and the lack of knowledge of French sentence patterns on the part of several teachers.

Tests and Test Results

The tests were all based on the reader, *Petites Conversations,* which the classes had used throughout the year. Some classes had completed the first 14 lessons whereas others had finished all the lessons. The tests were administered by the teachers.

The scores in the Reading Comprehension Test were not as high as might have been hoped for, although some students and classes did very well. Nine pupils received perfect scores; 30 received scores in the 90's; and 52 received scores in the 80's for a total of 91 out of 365 scoring 80 or above. 35 scored in the 70's and 54 in the 60's, leaving 180 pupils who scored below 60.

The Listening Comprehension Test was administered by the evaluator. Again the scores were not as high as one might expect. Only four classes received averages in the 70's.

Tape recordings of the readings by pupils were examined by the evaluator. Of the 243 children to whom it was possible to give a score, 42 received a score of *1;* 90, a score of *2;* 44, a score of *3;* 38, a score of *4;* and 29, a score of *5.* Some of the reading was amazingly good, some not less than gruesome. The majority of the low scores were concentrated in three classes. In all fairness, the evaluator felt the passage she had asked them to read was too long.

There was some drop in the conversation scores. This was not surprising to the evaluator because of the amount of translation she saw, the newness of some of the teachers in the Project, the emphasis put on reading by some of the teachers, the pupil turn-over, and the variety of teaching going on in some of the rooms. Where teachers are unsure of themselves, a book is a real security; they tend to neglect the oral in the interests of reading. It is to be hoped that, as the sixth-grade program gains in stability, experience, and improved knowledge of French on the part of the teachers, the listening and speaking skills will improve and be retained even with the addition of reading.

The Second Year of Reading and Related Language

The aim, as last year, was to continue developing the children's audio-lingual skills and also to begin the transition to reading and some writing. Again, the reading text was *Petites Conversations*.

The evaluation was limited to the sixth-grade classes in the French Project, and it was based specifically on the textbook in use for the transition to reading. The evaluation was based on five items: (1) a classroom visit where desired by a teacher, (2) a Listening Comprehension Test to discover if the children's listening skills were being maintained, lost, or improved during the transition to reading, (3) a simple Conversation Test for selected pupils from each class to determine if conversational skills were being maintained, impaired, or improved along with the introduction to reading, (4) tape-recording of a paragraph read orally by representative pupils from each room, and (5) a Reading Comprehension Test to attempt to learn these sixth graders' ability to comprehend simple sentences based on the vocabulary and sentence patterns of the textbook.

Visits were made to 11 rooms containing 353 pupils. No class was taught by a specialist. Four of the teachers were new to the Project and one had moved from teaching fifth to sixth grade. For five teachers out of 11 this was their first attempt at teaching reading.

Several other factors complicated the teaching of French. Due to shifts in population and school mergers, etc., many of the classes had pupils who had not been in the program prior to this school term. In some cases almost a third of the pupils were new to the program. Several schools had homogeneous groupings which made it impossible to attempt any valid study of performance per thirds as was done previously. Finally, not all classes had completed the same amount or kind of work in *Petites Conversations*.

Class Observations

Of the four classes observed, three were taught by the teacher and one by a capable pupil. Two of the teachers and the pupil attempted to conduct the class entirely in French; one teacher used a great deal of English. The classes generally included question-and-answer type conversation on a variety of subjects, group reading, and individual reading of a passage from the textbook or one written on the chalkboard, *dictée* and other sentence writing on the chalkboard, dialogues, studied and impromptu, and in two classes a dramatization of *Les Trois Ours*, which had been previously rehearsed. There were games, too.

In general, the classes were lively, well paced for interest, and included a variety of activities. The chidren seemed eager to perform. One could see that the teachers took their work seriously, had prepared their lessons carefully and they were humble about their own shortcomings.

The Listening Comprehension Test

Of the 247 pupils who took the test, 47.29 per cent scored 93 or above, while 4.64 per cent scored below 60. It seems that those who had learned less, i.e., the fewer number of lessons, had learned them less well, while quantity also meant quality for those who had done a larger amount of work.

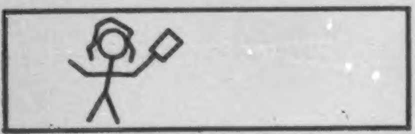
The Individual Conversation Test

In 1961, the evaluator was able to compare the conversational skills of the sixth graders tested that year with the skills they had shown as fifth graders the year before. You will remember that there was some loss in conversational skills in the sixth-grade group. The average score for fifth graders was 2.16. In 1961, as sixth graders, it was 2.5.

There was no fifth-grade score for the present sixth grade, but the score found was the lowest yet found in any evaluation. There was good work going on in some of the rooms but there was a real loss in others. This loss may be due to the amount of translation which some teachers think they have to do, the newness of some of the teachers to the Project, the emphasis put on reading by many of the teachers, the pupil turn-over, and the various kinds of teaching going on in the different rooms. Again, it is hoped that as teachers gain in stability, experiences, and improved knowledge of French the listening skills will improve tape-recording.

The Reading Comprehension Test

The test was administered by the classroom teacher prior to the arrival of the evaluator. The test consisted of four parts. Part I was a series of statements based on the textbook, *Petites Conversations,* for for which a pupil had to draw some illustrations for the correct answers. For example:



Suzanne a une carte-postale à la main.

The other parts consisted of paragraphs in French and check-off answers following the paragraph. Naturally all statements were in French.

Some of the pupils' drawings were truly ingenious which gave clear indications that they clearly understood various aspects of the paragraphs. Others were partially complete and, of course, some missed the points altogether.

The scores on the reading comprehension were encouraging in some classes and disappointing in others. Only 29 of the 336 pupils scored 90 and above. On the other hand, 165 pupils had scores below 60. What is the cause of such poor showing in reading? There may be many answers, both known and unknown. Certainly the main one is the lack of teacher skills in French. Lack of proper techniques in teaching reading in a language in which the teacher is hesitant and unsure of herself would stand high as one of the causes. Then there is the high teacher turnover. A school certainly has little control over this. And a high pupil turnover and mixing of classes did not add to the success of the project. Too, the failure to make French an integral part of the curriculum would be a cause as would the insufficient time spent on French in some rooms.

Conclusion

On the basis of the favorable level of achievement during 1959 and 1960, it seems that the "little-by-little" method is effective in getting the whole school to develop a workable level of spoken French. Since there are so many skills involved in the reading and writing of a foreign language, it almost takes a specialist to teach these phases of language development. The "little-by-little" method of training teachers in a foreign language such as French fails to give the teachers a feeling of security in the language strong enough to permit them to teach reading effectively.

PART IV Cooperative Meetings

A. National Council of Teachers of English

1. Project English Attacks Curriculum Problems

J. N. HOOK

THIS will be an informal, largely factual summary of the major activities of Project English to date. If the title for this presentation had not been assigned, I might have chosen to call it "Two Thirds of a Penny," because that represents the total expenditures of Project English so far: about two thirds of a penny per capita. (An additional two cents has been committed but not yet spent.) I shall therefore be reporting to you on what has happened to your fraction of a cent.

Project English, sponsored by the U. S. Office of Education, is an attempt by the federal government to effect some of the needed improvements in the teaching of English on the elementary, secondary, and college levels. The needs were described in some detail in 1961 in the NCTE publication *The National Interest and the Teaching of English*. In brief, the especially urgent needs encompass a clearer focus of instruction upon language, literature, and composition; improvement in sequential planning and articulation; improvement of preparatory programs for prospective teachers; improvement of preparation of currently employed teachers; encouragement of significant research in the teaching of English; and the recruitment of additional teachers of English. Project English is not intended to develop a national curriculum, but to help in whatever ways are possible to meet such needs.

Shortly after I began my service as Coordinator during the formative stages of the Project, in early 1962, I made this statement: "Vital to Project English are cooperation among teachers on all academic levels, cooperation of college English and Education departments, cooperation of teachers and administrators, and cooperation of local, state, and federal agencies." So far the amount of such cooperation has been extensive. Whatever has so far been achieved is the result of the work of literally hundreds of persons and a score or more of organizations, including a number of representatives of the International Reading Association.

Four major activities have been the focal points of Project English. The first of these, research development, includes conferences, seminars, and certain individual projects of an information-gathering type. Here are some examples:

1. In May, 1962, we held in Pittsburgh a conference on needed research in the teaching of English. About fifty persons, representing all three levels of instruction and a number of specialties, conferred for three days. The monograph that resulted, *Needed Research in the Teaching of English* (OE-30010) is available from the Government Printing Office for 55 cents.
2. Also in May, 1962, in Washington, there was a conference on English for the culturally deprived in large cities. A monograph will be published.
3. In August, 1962, also in Washington, there was held a conference on the teaching of beginning reading, in which many IRA leaders participated.

4. A conference of college English department chairmen was held at the University of Illinois in December, 1962, for the purpose of exploring ways in which college departments of English may contribute to the improvement of instruction on all levels. A monograph has been prepared by the University of Illinois.
5. At the University of Iowa a study is under way of the present state of knowledge about composition teaching.
6. A special team was employed to conduct an evaluation of the twenty institutes for secondary English teachers, sponsored by the Commission on English of the College Entrance Examination Board. If the proposals for federal support of institutes for English teachers are approved, the report of this team will be invaluable.
7. As a final example under this heading, at Brown University a "linguistic corpus," consisting of about a million words of modern American prose, will be placed on computer tape for use in detailed analysis of modern English sentences, a type of analysis which heretofore has had to be accomplished laboriously by individual researchers.

The second major undertaking of Project English has been a number of research studies, conducted cooperatively with funds from both the Office of Education and specific colleges, universities, or state departments of education. Thirty-seven such studies are in progress. Here are a dozen examples:

In *North Carolina,* a study of the relationship between ability in written composition and awareness of syntactic relationships

In *Delaware,* a study of ways of developing unfamiliar concepts in secondary students

In *Pennsylvania,* an analysis of characteristics of compositions written by children in intermediate grades

In *New York,* a comparison of the practical results of instruction in traditional grammar and in structural linguistics

In *Illinois,* a study of instruction of high school students in reading for different purposes

In *Iowa,* an evaluation of five methods of teaching spelling in second and third grades

In *Michigan,* a comparison of the reading, writing, and spelling achievement of groups of English, Scottish, and American children

In *Colorado,* a development of a high school course of study in grammar and composition based on a correlation of the traditional and structural methods of linguistic analysis

In *Florida,* a sudy of the effect of practice and evaluation on improvement of written composition

In *Illinois,* a study of English programs of high schools that consistently educate outstanding students in English

In *Florida,* a study of differences in grammatical structures used by students at three different grade levels

Most expensive and extensive of the four major activities of Project English are its curriculum study centers. Each of these will last about five years and will be financed by the federal government to the extent of about a quarter of a million dollars, in addition to a share of the cost borne by the local institution. The purpose of a curriculum study center is to develop and test a curriculum for specified grade levels and with a particular emphasis. It is anticipated that when reports from the centers appear, it will be possible for interested schools to examine whichever curriculums appear successful and choose from their component parts those elements which are most applicable to other situations. Thus we shall have a number of curriculums which stress sequential development of tested materials.

Ten of these centers are now in operation, with decision on another still pending and with some additional proposals expected. The ten, listed alphabetically by institution, are as follows:

1. Carnegie Institute of Technology, English for the able college-bound in grades 10, 11, 12.

2. Florida State University, a comparison of three patterns for the junior high school English curriculum
3. University of Georgia, a K-6 composition program, using materials based on relationship between concept attainment and language proficiency
4. Hunter College, English for culturally deprived children in junior high schools
5. University of Minnesota, linguistics in the high school program
6. University of Nebraska, a K-13 program with emphasis on composition
7. Northwestern University, a 7-14 program with emphasis on composition
8. University of Oregon, a comprehensive program for 7-12
9. Teachers College, Columbia, teaching English as a second language
10. Wisconsin State Department of Education, a statewide English program for K-12

Although the contracts for these centers are normally with a college or university, it is not to be supposed that professors will make decisions in their ivory towers. In each center, professors and classroom teachers of various grade levels will sit down together, work out course outlines cooperatively in accordance with predetermined principles for the center, arrange to have these materials tested in a number of classroom situations, make necessary revisions, and try out the materials and procedures again.

The final aspect of the work of Project English is the newest—demonstration centers. The theory here is that some very fine things are being done in the nation's English classrooms, but that often not even the teacher across the corridor knows of their existence, let alone the teacher across the state or the nation. A demonstration center is expected to exhibit a working program in such a way that large numbers of interested teachers may find out about it.

So far, only four demonstration centers are under way. Euclid Junior High School (Ohio), in collaboration with Western Reserve University, is conducting a demonstration of a forward-looking junior high program. Schools working in conjunction with Syracuse University are displaying a reading program for secondary schools. At the University of California, films are being prepared to demonstrate effective teaching of literature in the tenth grade. At New York University and cooperating schools, there is a demonstration of current high school programs in linguistics.

Persons wishing to keep informed about activities of Project English may have their names put on the mailing list for the *Newsletter* by sending a request to Coordinator, Project English, U. S. Office of Education, Washington 25, D. C. Those who wish information about submitting proposals may secure it from the same source.

In conclusion, let me re-emphasize that Project English is making no attempt to create a national curriculum. It is intended to test various hypotheses methodically and to let results be known so that interested schools may apply to their own needs whatever they find that they consider helpful. That is a fairly large return for two thirds of a penny.

2. The Role of the Scholar in Changing the English Curriculum

LENNOX GREY

If you have been reading Jerome Bruner's *On Knowing* (1962), which in many ways is even more valuable for teachers of English and reading than his widely discussed *Process of Education* (1960), you may have been struck by some passages that come close to symbolizing the ways of scholars with the curriculum today, particularly in the cross fertilization of the various disciplines. They seem to me also a possible forecast of a fifth or sixth stage in a clearly traceable series of scholarly influences in the changing English curriculum over the past 40 years, particularly as it bears on reading, which will be the concern of this paper.

Near the start of the Introduction to

On Knowing, which is subtitled, lower-case, "essays for the left hand," the Harvard psychologist has this to say:

> One thing has become increasingly clear in pursuing the nature of knowing. It is that the conventional apparatus of the psychologist—both his instruments of investigation and the conceptual tools he uses in the interpretation of his data—leaves one approach unexplored. It is an approach whose medium of exchange seems to be the metaphor paid out by the left hand. It is a way that grows happy hunches and "lucky" guesses, that is stirred into connective activity by the poet and the necromancer looking sidewise rather than directly. Their hunches and intuitions generate a grammar of their own—searching out connections, suggesting similarities, weaving ideas loosely in a trial web. Once, having come in late to dine at King's College, Cambridge, with my friend Oliver Zangwill, I found myself seated next to a delightful older man whose name I had not caught in the hurried and mumbled introductions. We agreed that the climate of debate at Cambridge might be vastly improved if some far-sighted philanthropist would establish a chair of the Black Arts and Thaumaturgy. . . . My neighbor at table turned out to be E. M. Forster.[1]

And then in Essay I, metaphorically entitled "The Shape of Experience," he goes on to show what had shaped his thinking and his book. Concerning the essay "Identity and the Modern Novel," he says by way of forecast,

> [It] was given as a guest lecture in Albert Guerard's Harvard course on the modern novel. Guerard and I had talked for years about giving a joint course on the psychology of literature. We had spent many evenings together discussing Gide, Conrad, Hardy, and many younger novelists whose work he had led me to. An exchange of guest lectures was as close as we came to realizing our plan before he departed to take the chair in comparative literature created in honor of his father at Stanford University.[2]

And concerning another essay, "Art as a Mode of Knowing," he says that it "was written originally as a long letter to a painter friend . . . who had been struggling bravely to teach me to paint and to look more wisely at pictures."[3]

Exercising a little of the "close reading" technique which literary scholars like Richards, Ransom, Blackmur, Brooks and others have gradually brought to the teaching of English over the past 30 years, what do we note?

First is the exchange between scholars in different disciplines, one effect of which Stanley E. Hyman observed in *The Armed Vision* when he said:

> The literary criticism written in English over the past quarter of a century is qualitatively different from any previous criticism. . . . What modern criticism is could be defined crudely and somewhat inaccurately as ***the organized use of non-literary techniques and bodies of knowledge to obtain insights into literature.***[4]

With Bruner, happily, we see the influence going the other way also, from the literary scholar to the psychologist. And with Bruner also, as a second major consideration, we may note the potential for curriculum change (both for English and for other fields) when a scholarly psychologist, widely read and respected by curriculum makers, advocates literature as an essential way of knowing, points to metaphor as one of the keys, and does so in the context of the broader Humanities of both literature and art. Third and not least important, we may note Bruner's own metaphors, not only of the "left hand" but of "weaving ideas loosely in a trial web."

In a kind of trial web—both left- and right-handed—let us look at some major scholarly contributions to the English curriculum, first in the past five years, and then in the past 40.

1. Since 1958, as we all know, there has been a particularly strong and explicit emphasis on enlisting literary and linguistic scholars in curriculum development, not only in the graduate and undergraduate programs but in the secondary schools, and even in the elementary schools. In 1958, prior to any pressure from Sputnik or Rickover, the National Council of Teachers of English published the volume *Contemporary Literary Scholarship,* edited by Lewis Leary, and contributed to by 19 "scholar-teachers" in American, British, and Comparative Literature. In 1958, also, some 28 scholars and teachers from universities, colleges, high schools and elementary schools came together in a series of four meetings initiated by the Modern Language Association, and jointly sponsored by the MLA, NCTE, CEA and American Studies Association, with financial support from the Ford Foundation. In 1959 appeared the resulting 16-page bulletin *The Basic Issues in the Teaching of English,* jointly published by the four associations; and with them came the proposals of George Winchester Stone, executive secretary of the Modern Language Association, in "An Articulated English Program: A Hypothesis to Test," urging radical concentration on a writing component, a literature component, and teacher training elements focused on these two components. In the ensuing four years we have seen a chain of reinforcing developments increasingly emphasizing scholarly participation. These have included the NCTE-sponsored *The National Interest and the Teaching of English* (1961), "Project English" of the U. S. Office of Education with its Curriculum Study Centers, Demonstration Centers, and Co-operative Research projects, and the widely publicized summer institutes of the Commission on English of the College Entrance Examination Board.

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[1] Jerome S. Bruner, ***On Knowing: essays for the left hand.*** Cambridge: Harvard University Press, 1962, pp. 1-4.

[2] ***Ibid.***, p. 12.

[3] ***Ibid.***, p. 12.

[4] Stanley Edgar Hyman, ***The Armed Vision.*** New York: Knopf, 1948, p. 3.

Most of us have welcomed such explicit scholarly interest. We have needed a more vigorous dialectic in our field, and a making explicit of what has long been implicit. With foundation funds, CEEB funds, and federal funds available, old slow processes may give way to swifter communication from scholar to teacher.

2. Actually, in the course of 40 years of teaching, I have seen few durable aspects and developments of the English program that were not basically due to scholars. Teaching method has followed scholarly method fairly consistently since the start of English as an organized field a century ago—successively in the biographical and historical approaches to literature, in the study of literary types based variously on Artistotle and comparative literature, more recently in the study of symbol and myth, and most recently in structural linguistics in its own right, and in applications to writing, reading and stylistic analysis. The main questions are not of *scholarship* or *no scholarship,* but of the distance or lag with which teaching method may follow scholarly method—whether of recent or outworn or belated scholarship, or of preoccupation with one or two or three kinds of scholarship at the expense of others, as fashions have shifted.

In these past 40 years, veteran teachers like myself have had the good fortune to see at least five such exciting widespread curriculum developments in English which can be traced to scholarly developments; and I believe I see another coming which will have particular impact on teachers of English and teachers of reading, even to the point of bringing us close together. We have both revolved about the same center—the printed word—but in orbits with different axes.

Since the five exciting developments have had cumulative effects and will have cumulative effects on any sixth and seventh that may come along, let me name and describe them, en route to the sixth.

The first, and probably the most important in the long run, was the "broad field" Humanities aspect of the General Education movement of the 1920's and 1930's—a movement seeking to synthesize the splintered elective liberal arts programs of the first two decades of our century, commonly blamed on President Eliot of Harvard, who in his day had tried to make more liberal the education of that day. The once exciting studies of classical times, which in good scholarly hands included studies of the interplay of language, literature, art, history, philosophy, archeology, economics and politics, had lost their older significance in preoccupations with parsing Latin texts. In Eliot's day no new synthesis could be achieved, but one lay ahead.

The General Education movement, in which the Renaissance term Humanities was revived, is traceable directly to the coming together of scholars from various fields in synthesizing "war issues" courses at Columbia and Chicago in 1917 and 1918. At Columbia this took a social science emphasis (with a good deal of literary documentation) in the postwar course called "Contemporary Civilization." At Chicago it had a natural science emphasis which became marked in a postwar course called "The Nature of the World and Man." These developments came to be reflected or paralleled in a nation-wide development of broad social studies and general science courses in both colleges and secondary schools.

The development of broad Humanities programs, combining languages, literature, the other arts, philosophy, religion and their histories may seem a latecomer, not appearing in the college until the 1930's and laggard even now in the secondary schools. C. S. Boucher of Chicago, the historian-dean who designed the widely imitated Chicago program of 1931, once said playfully that the Humanities were what was left over after the natural and social science curricula were set up. As a matter of historical dating this might seem so at both Chicago and Columbia. But actually the Humanities courses had taken their start in scholarship as early as if not earlier than the other two. The chief designer of the Chicago Humanities was the humanistic historian Ferdinand Schevill, whose celebrated *History of Europe from the Reformation to the Present Day*, first published in 1925, paid considerable attention to art and literature. The graduate course in the History of Civilization which I took with him in 1923 was the prototype of that book and also of the freshman Humanities course established at Chicago in 1931, and widely imitated throughout America.

Again, though the Columbia Humanities course was not started officially until 1937, there had been comparable or complementary developments even earlier at Columbia in comparative literature and general literature studies at the turn of the century under Spingarn Fletcher, and later under Brander Matthews whose collection of *Chief European Dramatists* was used in an experimental forerunner of a humanities course in which I shared at the University of Minnesota in 1923.

Like the other broad field courses, the immediate forerunners of the Columbia Humanities course were linked with World War I, but in a different way from the "war issues" courses. John Erskine of Columbia College was invited to run a program in France at war's end for soldiers waiting to be sent home. Erskine offered studies in classics of the Western World in English. Classics of the Western World were also offered in an adult education "Peoples Program" in New York by scholars like Brebner, and at a more advanced level were studied in the Columbia colloquium under Erskine, Adler, and others. Some interesting competitions and cross fertilizations between Chicago and Columbia developed also.

Mortimer Adler was imported from the Columbia Colloquium to Chicago by President Hutchins to conduct a freshman honors Great Books program competing with the Schevill historical Humanities program.

While Humanities developments are no longer the most dramatic news in this era of space science, they have continued to spread not only in colleges and universities but in the adult Great Books programs, backed by the Chicago Great Books library, in the steady headway made by the John Hay Whitney Humanities fellowships for high school teachers, in the newer high school honors and advanced placement programs, and most recently in the new Encyclopedia Britannica Humanities films—also associated with the University of Chicago. From scholarly stirrings I know of but cannot discuss here, we may expect some very significant new Humanities developments in the years ahead—even to the point, perhaps, where high school English teachers may come to think of their role explicitly as English-Humanities, even as representatives of the other major fields think of themselves as History-Social Studies and Biology-Science or Physics-Science or Mathematics-Science. I shall come back to this theme at the end.

Not surprisingly, these initially scholarly General Education movements raised some questions about perceptive reading in the several broad fields—most conspicuously in W. S. Gray's symposium *Reading in General Education* published in 1940. But like many another subphenomenon of this kind, this one concerned with reading in the various disciplines (in Social Studies, Science, and English,—but not in Humanities) did not enlist more than passing interest of scholars, and has developed little in 23 years. There are signs now, however, that it may, thanks to such contacts as that of the psychologist Jerome Bruner with the literary scholar Guerard, and with others in other arts.

In the other four notable scholarly curriculum developments which I shall treat more briefly, there is also a cumulative force, an interplay, which may escape us at first listing: the scholarly and popular semantics developments of twenty-five years ago, the comprehensive communication movement, so called, of twenty years ago, the newer criticism (including the New Criticism, so called) whose roots go back at least to Richards' *Practical Criticism* (1929) but whose growth has come largely in the past 15 years, and the modern structural linguistics whose beginnings also came considerably before current acceptance.

To some the two-stemmed "semantics" movement of the 1930's may seem to have spent its force; but there is more than historical interest in the scholarly and popular balancing of Ogden and Richards' *The Meaning of Meaning* (1923) and Hugh Walpole's more popular book, on the one hand, and Korzybski's *Science and Sanity* (1948), S. I. Hayakawa's thoughtful, readable text, *Language in Action* (1941), the thoughtful semi-popular journal *ETC.*, and Stuart Chase's composite popularization *Tyranny of Words* (1938). Instead, it has changed from a surge to a part of the regular current of thought about our language, both general language and scholarly language. In every field, the semantics of the field is of major concern. Significantly, the most conspicuous field of philosophy today starts from semantic problems.

The communication movement in English, speech, and other communication arts, like the General-Education-Humanities developments to which it has always been closely related in my thinking, also presents a convergence of scholars on a central and pervasive concern of man at a very critical time—in World War II and after, when initial problems of morale and subsequent challenges of psychological warfare enlisted scholars in many fields, among them an English professor from the State University of Iowa, Wilbur Schramm, whose work with Lyman Bryson in the School and College Branch of the Office of War Information in enlisting scholars in the development of curricula for the U. S. Office of Education and the Army and Navy college English programs, is a significant unwritten chapter in the story of our profession. Modern interdisciplinary studies in communication and the communication arts take some of their concepts from the cultural sociologist Sumner, whose *Folkways*, published in 1906, has contributed to a variety of fields. It owes a good deal also to the philosopher George H. Mead of Chicago, whose lectures and writings on conceptions of the communicative or symbolic process collected by his student Charles Morris in the posthumous *Mind, Self & Society*, published in 1934, has influenced leaders in a number of fields—ranging from the philosopher John Dewey to the political scientist Harold Lasswell of Yale to the literary critic Lionel Trilling in *The Opposing Self* (1955). And again it owes more than a little, as English teachers think of communication, to I. A. Richards' ideas in *The Meaning of Meaning* (1923), *Practical Criticism* (1929), *The Principles of Literary Criticism* (1924), and his applications of this to teaching in the Humanities, first undertaken, under the auspices of the Progressive Education Association. Stanley Edgar Hyman, in *The Armed Vision* (1948), has dealt most suggestively with Richards' interest in literature as communication in his emphasis on the poem-audience relationship.

I agree with some observers that the "communication movement" has spent its first force, if it is not dead, and that in the face of the skillful recent rallying of English teachers to keep English sharply focused on American and British literature and on writing, with some aid from modern linguistics, there will probably be relatively few new freshman composition courses labelled "communication" added to the considerable number established since 1942; probably, in the interest of solidarity a considerable number may return to the label "English" alone. But English courses themselves have absorbed a good deal of the basic modern thinking about communication that inspired the communication courses, and so has the next movement, that of modern criticism in its concern for the symbolic nature of literature.

In the fourth great movement, literary criticism intent on symbol and myth has challenged literary history for prime place in scholarly research and teaching. Here again the name of I. A. Richards looms large, and with it again the concern with symbol, extended to that larger kind of "symbolic action" (to borrow a term from Kenneth Burke)—myth-making, whether in a *Moby Dick* or a Yoknapatawpha County. With Richards the basic concepts come from psychology, as they do for many others, where they are often combined with anthropological and psychoanalytical perceptions of symbol and myth, as in Maud Bodkin. A favorite word in the newer criticism is "tension" (often the "tension" between juxtaposed symbols). The "symbolic approach" can color the historical, as it does in most of the five most frequently named works of literary scholarship in a poll taken by Lewis Leary in 1957—Meyer Abrams' *The Mirror and the Lamp*: *Romantic Theory and the Critical Tradition* (1953) and in a number of others in the first 50, such as Henry Nash Smith's *Virgin Land*: *The American West As Symbol And Myth* (1950). The influence of the modern scholar-critic-teacher on the reading of literature is evident in such names as Cleanth Brooks, Robert Penn Warren, Kenneth Burke, John Crowe Ransom, Allan Tate, Richard Blackmur, all of whom have been concerned directly with teaching us how to read literature and criticism with new kinds of perception.

As with the General Education movement, this modern critical movement has great potential significance for reading. "Close reading" is one of its synonyms. So far it has been given surprisingly little explicit attention in textbooks on reading.

I have heard it said that the New Criticism also is passé as a movement, but again, as in the "communication movement," it has become infused in much college and high school teaching of literature.

At first glance, our fifth movement, modern descriptive structural linguistics, may seem of a different order. But when we turn to such inciting scholarly works as Bloomfield's *Language* (1914) and Sapir's *Language* (1921) we find these scholars writing of the symbolic character of communication with the same conceptions of the terms as in George H. Mead, with whom both were, in fact, associated at Chicago. Anthropological thinking about symbols and patterns of culture plays considerable part in these and in other linguists. As with the General Education developments of the 30's and 40's, and with the communication developments of the 40's and 50's, the incitements and excitements and economics of war contributed to the breaking of routine scholarship and routine curriculum patterns, notably in intensive foreign language programs. In the post-war Cold War era this has gradually been expanded in the teaching of English as a foreign or second language, and under these pressures has spread into the regular English program, thanks to the work of scholar-teachers like Charles Fries, Harold Allen, Paul Roberts, to name only three of the many you can think of.

3. What kind of a construct can we make of all this—what kind of a metaphor—what kind of a "trial web"?—thinking of the web not as something fixed, but as something made by movement, like the crossing tracks of creatures left on the beach in the morning, or a communication network.

The striking thing about all these developments has been the coming together of scholars and of teachers in various fields, after a relatively long period when scholarship signified isolation. Above all it has meant thinking about our interrelations. It means recognition as we read, of the concepts and constructs from many fields, grasped metaphorically at first, and then with great perception as we talk with one another. It does not mean for English, I am sure, a retreat into American and British literature and composition, as some have urged in order to make our subject "clear." In the recent efforts to do this, the most striking development has been the upsurging of two of the developments named earlier: the newer criticism, based as Hyman says on many nonliterary insights, and the newer scientific linguistics, born in part of anthropology and philology.

What does it mean for reading? It means what we see in this meeting: a coming together of specialists from various fields bearing on reading, deeply concerned with reading—some still on the fringe, perhaps, like this meeting and the one going on at this same time under the caption: *Grant Sponsored Studies*—The Harvard-Carnegie Reading Study (Reading Instruction in the Public Schools of the U. S. A.), The Columbia-Carnegie Study (Reading Research and Its Communication), City College of the University of New York-Carnegie Study (Approaches to Beginning Reading), University of Pittsburgh-Buhl Foundation Study (Teaching Children to Read French in the Elementary School).

And now back to Bruner's "web."

I have not heard at this convention the phrase "an ecology of reading" or a "the web of reading," but I am willing to wager that within five years we shall be hearing it here, in English conventions, and in other fields. The popular expression for the ecological concept is "the web of nature" or "the balance of nature," concerned with the interrelations of living things with one another and with their environment. Coming first out of botany, as a corrective to narrow laboratory study, the concept of this living web has spread through the rest of biology, in human ecology, into anthropological studies like those of Lloyd Warner on Newburyport, and from there into Marquand's *Point of No Return*—or if you prefer from the studies in marine biology which John Steinbeck made at Stanford and with his biologist friend Ed Ricketts, into the ecological concepts symbolically implicit in *The Grapes of Wrath*, and explicit in *Sea of Cortez, Cannery Row, Sweet Thursday*—yes, and in *Travels with Charley*. It provided an explicit closing section in Riesman's *The Lonely Crowd*, unfortunately omitted in the condensed paper back. It could hardly be more explicit in the reflections of scholarship in Rachel Carson's *The Sea Around Us* and *Silent Spring*.

Let me come near my close by reading to you a passage from a book entitled *Contemporary Approaches to Cognition/ A Symposium Held at the University of Colorado* (1957), listing Jerome S. Bruner first among seven psychologists.

After an Introduction by Karl F. Muenzinger on the difficulty of getting referents and words to match, appears this statement of purpose in Essay No. 1 by Egon Brunswick of the University of California:

> It is the contention of this paper that if there is anything that still ails psychology in general, and the psychology of cognition specifically, it is the neglect of investigation of environmental or ecological texture in favor of that of the texture of organismic structures and processes. (p. 6).

And so when we read Bruner's metaphor of the "trial web" we may find something more than a casual metaphor here.

What will be the effect of the web concept on the structure of the curriculum, and what we read for? My hunch is that it will not mean the breaking down of distinctions among the great areas of related interests in the Humanities, Natural Sciences and Social Sciences, but a greater concern with the webs of relationships within each of them. And we shall have to read accordingly—taking into account what the semanticists have taught us about transfer of meaning, and abstraction ladders, what communication specialists have made us consider in the interplay of who—says what—in what medium—in what context—to what effect, what the newer critics and the newer linguists have compelled us to consider in the arrangement and interplay of clusters of symbols, and now what humanistically-minded psychologists, themselves symbols of a new interplay, discover in trial webs, in the confessedly neglected area of cognition, basic to all the arts and sciences.

If I hear and read aright such scholar-teachers as Northrup Frye and Roy Harvey Pearce, to take only two of a number who are interested in the English curriculum, who excite graduate students in our universities, and who are in demand as speakers at our conventions, the web of thought in which they engage us seems to me an English-Humanities web, reaching far beyond an historian-critic web (which is an advance on either alone) and calling not for a return to narrow and exclusive concentration on two or three most familiar strands in the English program or in our concerns in reading, but for alertness to the interplay of whatever strands we may know best with other strands throughout the Humanities, and throughout the whole educational network.

B. National Conference on Research in English

1. Creative Writing Is Related to Reading

ALVINA TREUT BURROWS

Historically, writing had to precede reading. There could be nothing to read unless writing had been done, however long or short a time had elapsed between the first crude recordings and the translation back into sound and sense. It is an equally easy observation that one can read without being able to write. Some of us have experienced this in our limited competence in another language. But, contrariwise, one cannot write without reading one's own words. One can copy writing without making sense of it, but forcing symbols to convey one's meaning also forces one to clothe symbols with meaning which is reading. It is high time that we examine some of the relationships between learning to write and learning to read.

Dictated Composition as Beginning Reading Material

Good teachers for 50 or more years have used children's dictated composition as sources of reading content. Not all of the so-called experience charts thus produced could be called creative by any stretch of imagination, but many have elements of originality. Nearly all, even the dull pedantic ones, have some meaning for the pupils. So well known are the usual procedures of recording and reading children's dictation as to need no elaboration. Some of these charts include delightfully childlike expression. From a sequence of charts a reasonable repetition accrues and leads to a known sight vocabulary. From these activities children make a transition to reading of books and to word study skills.

This functional pathway to reading has been traveled by quite a few thousand children. I wish I could say millions. In my observation, children learn more productively from this natural blending of their own written expression with the words written by others than by other processes. That this is true is attested by the attempts by some commercial houses to combine writing and reading more directly in beginning reading systems.

Story Writing in Middle and Upper Grades

Other facets of human learning contribute to the mutual productivity of composition and of reading, especially in later grades. Though less obvious than the sequences of learnings in dictating and reading experience charts, they are no less vital. A story or two and later a bit of verse may serve to illustrate the phenomena of identification and projection.

The Adventures of Professor Frazzle

Professor Frazzle entered his laboratory in the Jones Building and took out a flask of hydrochloric acid and poured some in a tube. Next, he poured in some selenium oxychloride acid and filled it up with nitroglycerin. Soon the bottom melted out of the tube, and the mixture fell to the floor. It melted through that and in this way reached the middle of the earth. The professor took out his telescope and anxiously peered through it. He thought he saw a faint glimmer but he wasn't sure. He telephoned an asbestos company and ordered them to make an asbestos balloon. Next he telephoned one of his assistants and told him to find a company that made liquid air because he wanted to make a balloon to go to the middle of the earth.

Finally the day came when the balloon was completed. The Professor had received a telegram from his assistant the day before saying that he had found a company that manufactured liquid air and had ordered a supply of it. Soon a giant refrigerator truck rolled up. The driver got out and explained that he was from the Acme Liquid Air Company. He said that Professor Frazzle's 493 million, 673 thousand, 649 cubic feet of liquid air were here.

"But," exclaimed Professor Frazzle, "it is too much. I want you to take away all but five hundred cubic feet."

"Say, get this straight," said the truck driver. "I was supposed to deliver this, and I didn't have anything to do with the order."

"I don't care," said Professor Frazzle. "Take the rest away except the five hundred cubic feet." He went to his laboratory in a stamping rage, called up his assistant, and fired him on the spot. Next he called up

> one of his more reliable assistants and told him to find a company that manufactured chemicals. He ordered one hundred gallons of hydrochloric acid, one hundred gallons of selenium oxychloride, and seven hundred gallons of nitroglycerin.
>
> When it was delivered the truckman dropped the huge container. It exploded with such enormous force that it dug a big round hole one thousand miles deep into the earth. This was exactly what Professor Frazzle wanted. He took his faithful assistant exploring with him in the balloon that was waiting. They made the most important discovery of anybody about the heat and the rocks that are in the middle of the earth. People are still studying about what they did.[1]

Jack read his story to me first and it was easy to see that the impatient but inventive professor was his swashbuckling protagonist. He read it later to the assembled fifth grade with obvious swagger and relish. Their laughter at the antics of both the assistant and the delivery man contributed to Jack's self esteem, thus lubricating the machinery of learning. Moreover, Jack, through his own characters and through his own words put down on paper, was practicing the skills of identification and projection so necessary to the intelligent reading of fiction.

The arts of oral reading are likewise used in reading one's own composition to an appreciative audience. Reading one's own stories is direct face-to-face communication; it is not an exercise in analysis or criticism. Comments are limited to noting enjoyable detail or lifelike character, to good ideas and inventions, to surprise turning of events, and to vivid phrasing and suspense. Reaction of the audience to excitement or tension is recognized by the reader. The deft sketching of a character or a whole picture, as in the case of the irate delivery man, enables both author and audience to play their mutual roles. One is implying a whole set of circumstances in a few words; the other is inferring these facts and relationships from the same few words. These skills are mutually supportive.

Another valued oral reading skill works in this sharing of one's own story with a close-knit audience. Children almost automatically, after gaining reasonable skill in reading, use appropriate intonation patterns in reading aoud their own material. I have seen a child read a paper innocent of punctuation with appropriate stress and terminal voice patterns. He was matching the patterns of speech melody, automated by practice since he first heard speech, to the sense he wanted to convey to his hearers. He knew, almost intuitively, that every English sentence has one emphasized or accentuated word. Now most children put in some punctuation as they write, even in stories. They supply a bit more as they practice reading alone before doing so for the class, and this suffices for the important goal of communicating the action and pictures of a story to the eager audience.

Values of Children's Poetic Expression

There is one more aspect of composition that cannot be ignored and that is sensitivity to the beauty and power of language. Children—most children—love words. They love words for rhythm and mood and sense; for their length and brevity, for their mouth-tickling feeling. Power to shape words into pleasing forms so as to encase and transmit some of their own feelings is an experience that lifts children into a new world of power. Consider:

Cherry Tree

We've got a Japanese cherry tree
That grows in our backyard.
It glows with pink
And makes a background
For all the other things—
Like a candle in the corner.[2]

In quite another vein, but evoking a busy, bustling scene with a contrasting conclusion:

When I'm in New York
All I see is crowds—
Some going in theatres
Some going down the street
Some going in offices.
In the night
I see elevator lights:
The buildings light up,
They look like fireflies
Anchored in the air.[3]

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[1] Alvina Treut Burrows and Russell G. Stauffer, *American English Book 6* (Teachers Edition). New York: The John C. Winston Company, 1962, pp. 243-244.

[2], [3] Alvina Treut Burrows, June D. Ferebee, Doris C. Jackson, Dorothy O. Saunders, *They All Want to Write*. New York: Prentice-Hall, Inc., 1952, pp. 133, 138.

And here a child has made the words themselves into a pattern beyond but framing his meaning:

The bee sang a song
  Buzz-buzz-buzz
I wonder if he's mad
  Buzz-buzz-buzz
He buzzed around the flowers
  Buzz-buzz-buzz
He landed on my nose
  Buzz-buzz-buzz
And now I know he's mad
  Buzz-buzz-buzz
    OW![4]

Even though the vast majority of our children will not become serious poets, they will almost inevitably value poetry if their poetic expression has been valued. Further, the economy of expression necessary in verse, with its deft selection of sensory detail, intensifies their awareness of good writing. At least a few students of composition are convinced that honest and satisfying attempts to write poetry, at very least, sharpen one's writing of prose. I think it very likely too, though I cannot prove it here and now. I am much more sure, however, that a child's lyrical expression fortifies him in his love of word patterns and visual imagery just as poetry fortifies him in his search for order and beauty, a search as essential to his own healthy, growing personality as it is essential for wise and creative reading.

2. Creative Writing and Power in Reading

JACK A. HOLMES

My friends, let me set the stage by quoting an excerpt from an article I wrote some ten years ago on The Heritage of Man:

> In God's Great Experiment, when radioactive rays affect genes life must change. His plan selects the best to survive. And so it was that an African ape with a mutated gene and a short pelvic bone began to run on his two hind legs. His hands are free, but he still swings from trees, for he has the head of an ape! Evolution continues until at last *Swancombe*, more man than ape, learns to use a stone to bring down his game. A rock, a hand, and the mind of a man, and a stone age of culture began! . . .
>
> —And this lasted for a long long time—
>
> . . . Then, out of the massive crudeness of the Egyptian Pyramids and the Great China Wall arise the graceful columns of Greece. Beauty beyond belief continues to unfold as the temples of Athens and the sculptured gods are chiselled from stone. Here are a people who can think and can act, and who go back to nature for design! The Greeks discover the mind! . . . [When] the blind poet sings his Odyssey. (*Holmes*, 1953).

And this, the most exciting discovery of all times, *the discovery of the mind is the heart of my concern this afternoon for the simple reason that in every generation each child must be led to rediscover it for himself if the true purpose of education is to be fulfilled.* While there are many ways[1] of fostering this discovery I should like to propose that two of the most effective tools in the school's curriculum for doing so are reading and writing —especially, reading for power and creative writing—particularly, the writing of poetry.

Our task of exploring a relationship between creative writing and reading is made difficult because in doing so we must try to tie together the products of a science with the methods of an art. The experimental study upon which I will report had as its goal the discovering of just what it is that makes one student differ from another in his ability to read with power. On the other hand, such excellent books as *The Process of Creative Writing* by Pearl Hogrefe (1956) and *Let Them Write Poetry* by Nina Willis Walter (1962), to mention only two, attest to the fact that the teaching of creative writing is still very much of an art.

The Experiment

The study (Holmes and Singer, 1961) was complex and I have reported on other parts of it in the *IRA Conference Proceedings* in the past (1962). I propose now to direct our attention to that part of the experiment which investigated factors underlying power in reading in verbally bright v. verbally dull high school students. By analyzing the degree to which *the members* of each group utilize a different set of subabilities (or different amounts of the same subabilities) to excel in power *within* their particular groups, we may be able to gain some insight as to just what factors are necessary to (a) lay the ground work for developing powerful readers and (b) make powerful readers more powerful.

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[4] Alvina Treut Burrows, Russell G. Stauffer, June D. Ferebee. *American English Book 5* (Teachers Edition). New York: The John C. Winston Company, 1961, p. 139.

[1] See paper by Henry Bamman on "Developing Reading Competencies Through Mathematics and Science," *International Reading Association Conference Proceedings*, Vol. 8, 1963 (current issue), p. 110.

In the major section of the investigation 400 high school students took a highly reliable power of reading test and also 54 other tests covering the domains which may be categorized as primary mental abilities, linguistic abilities, visual- and auditory-perceptual abilities, academic attitudes, areas of interest, and emotional-social problems. The interesting results were that out of these 54 variables *only eight were selected* at Level I *as necessary to "explain" why one high school student differed from another in his ability to read with power.* Scrutiny of these eight, however, makes it crystal clear that for students in general to read with power, verbal ability, as assessed by the various vocabulary tests, is absolutely necessary. By the way, similar results were obtained at both the elementary (Singer, 1960) and college (Holmes, 1954) levels.

The Statistical Method

Perhaps I should take a moment to say that the substrata analysis which we used is a multiple correlation technique designed to select from a pool of tests, that team of tests which tends best to predict a criterion. Our analysis begins by first selecting from the pool of 54 that test which is the *most valid* predictor of power of reading. The analysis proceeds to statistically partial out the contribution in the variance of the criterion so "explained," and then goes on to search for and select the next best predictor test. The procedure is continued until all the variance in the criterion that can be explained legitimately by the correlations has been exhausted.

A Statistical Limitation

In this analysis, as in all statistical analyses based upon individual differences, certain prerequisite conditions for success in the criterion have no way of being indicated because they are never taken into consideration in the first place. For instance, life is necessary for the average high school student to read; and yet, life does *not* manifest itself as a necessary factor in the analysis. All students have this quality, but our measuring instruments are not delicate enough to detect individual differences in the *amount* of life possessed by the individual members of a high school student body. Our analysis has simply shown us *what else*, within the limits of the instruments employed, is used by high school students in general to read with power. In a similar fashion, if we would analyze only those students in our total group who had *very high* scores in vocabulary, we, in one sense, would *approach* a situation for *vocabulary* not unlike the situation for *life* in our general analysis.

The Sample

To this end then, the 108 verbally brightest and 108 verbally dullest students were selected from the sample of 400.

Experimental Results

Table I (*p. 274*) shows the substrata factors found to underlie power of reading in the three groups. The central column shows, as I indicated above, that vocabulary in one form or another (i.e. measured in isolation, in context, or as visual verbal meaning) is fundamental to the process of power of reading for students in general. Further, the fact that the members of the verbally dull group (column one) manifest a greater dependency upon vocabulary for ingroup competition than do the members of the bright group (column 3) would seem to reinforce this conclusion regarding the basic importance of vocabulary. Note well that *in* the verbally dull group 50 per cent of their success in power of reading is dependent upon their knowledge of words, whereas only 20 per cent of power of reading within the verbally bright can be so accounted for. Let me make this very clear. The large vocabulary of the verbally bright is obviously *used* to sheer off competition in general as indicated in column 2; but, since they all possess an adequate

Table I
Substrata Factors Underlying Power of Reading

Variable Precipitated at Level I	Per cent of Variance in Power of Reading Explained*					
	Verbally Dull		General Sample		Verbally Bright	
Vocabulary in Isolation	27%	50%	16%	38%	13%	20%
Vocabulary in Context	23		16		......	
Visual Verbal Meaning	......		6		7	
Verbal Analogies	17		16		14	
Auding (Listening Comprehension)	......		16		......	
Word Fluency	......		......		10	
Range of Information	......		......		9	
Tonal Movement	4		......		......	
Tone Intensity	......		3		......	
Mechanical Interest	......		1		......	
Study Planning and Delib.	......		1		......	
TOTAL VARIANCE EXPLAINED	71%		75%		53%	
Criterion Variance Unexplained	29%		25%		47%	
Total Criterion Variance	100%		100%		100%	

*All figures rounded.

supply, it is not such a potent factor in determining who shall be the very best reader, the next best, etc. *within* their *own* verbally bright group.

Beyond knowing clean-cut definitions and discovering the meaning of words from context cues, the need to manipulate word concepts in reading is manifested by the variance accounted for in the test on verbal analogies. Note that verbal analogies (hand is to glove as foot is to shoe, etc.) accounts for 17 per cent of whatever it is that makes for power of reading within the verbally dull group, 16 per cent for students in general, and 14 per cent within the verbally bright group. Proceeding down the Table, we see that the verbally dull are dependent to some extent upon their appreciation of tonal movement. The general sample depends upon auding, tone intensity, mechanical interest, and study planning and deliberation. Finally, the bright utilize their differential knowledge of range of information and their word fluency to help "sheer off" ingroup competition. Altogether, the study accounts for 71, 75, and 53 per cent of the variance in power of reading in the three respective groups. The question is: What *other* strengths are the verbally bright drawing upon in order to realize outstanding ingroup achievement in power of reading? Since the Substrata-Factor Theory (1960) defines reading as "an audio-visual verbal-processing skill of symbolic reasoning," we may hypothesize at once that a large portion of the as yet unaccounted for variance in power of reading eventually will be found in a greater sensitivity to the factors that make for creative writing; for, powerful reading implies understanding-in-depth powerful writing!

Creative Imagination and Interpretation

In order to illustrate specifically just what factors in creative writing I would predict as underlying power of reading, I first turned to the works of the lesser and greater poets of which we are all familiar. I soon found, however, that my efforts at interpreting *the processes* by which these poets, themselves, developed their poems were, in all honesty, interpretations based upon my own experience. Therefore, in the interest of science and its demands for first-hand observation, I decided to risk other obvious hazards by reporting on certain growth processes that I know took place in the development of some of my own creative efforts.

In humble modesty then, I present to the nation's foremost teachers of English and critics of creative writing, two poems which I started at almost precisely the same time while still a student in junior college. The comparison I hope to draw is based upon the fact that the first poem was finished the summer it was started; whereas, the second I was only able to finish a year or so ago. The question is "why" since the inspiration for both poems arose at the same time while vacationing in the incomparable valley of Yosemite National Park.

The First Poem

So imagine, if you will, this granite dome (projecting up higher than any other prominence on the rim of the valley, save Half Dome and Cloud's Rest), supporting a lone Jeffrey Pine which is exposed to the blasting winds and harshest weather the year around. Across the void of the valley, directly opposite of this tree, are Yosemite Falls.

Further to understand the gist of the poem you must realize that two great glaciers slid down from upper country to fuse and gorge out this Yosemite valley. In the floor of the valley there are many magnificent redwood trees, sequoia gigantia, which, while unbelievably tall, are dwarfed by the height of the sheer walls that surround them. So much for the background. Let us turn to the poem.

Storm Scarred Pine

(Sentinel Dome, Yosemite National Park)

Oh, haggard pine, with conquering hand,
Oh, fearless lonely mate,
I fancy legends as you stand—
The reason for your fate?
I've asked the winds, O royal sage,
To tell me of your hermitage.
They've whispered, you, O free-lance pine,
Have risen from the ranks.
They told me when you left the line
With King Sequoia's thanks,
You took a long and solemn vow
To hold your own by knotted bough.
You swore, with shapeless twisted grip
To stand upon your dome;
And with your mighty branches whip
The winds that blast your home.
They say your spirit's unafraid
And often they have felt your blade.
But, "Storm Scarred Pine" of Sentinel Dome,
Pause in your battling strife.
Look down below your sentinel home
Where gored that glacial knife.
Sight out beyond this wonderous vast
Where dreamy clouds go floating past.
Now feast your heart without alarm
Upon that rugged crest—
Absorb this great surrounding charm,
And take your well-earned rest.
Oh, Pine, exalt upon this scene
And ask yourself: What does it mean?
Then when you've filled your soul entire,
And when your head is bent—
Then harken to this frozen choir
Of snowy sacrament
And offer yours in silent theme
Along with this great void supreme.
In awe you'll tremble at the gorge,
As would a reverent tree.
O mighty was the hand to forge
This grand Yosemite.
Now look where drops this great expanse
Sheared clean by nature's icy lance—
There slipping from enchanted walls
With Neptune's newborn fire,
Tumble majestic waterfalls
In gleaming white attire.
I envy you, old storm scarred pine,
And wish your home were also mine.
And if I were a storm scarred pine
Commanding such a view,
I'd stand upon a dome divine—
Defy the winds which blew.
I'd fight for this old Sentinel Dome,
And keep it for my very own.
O tree that stands so vulnerable,
In tribute let me chant;
Such spirit is invincible,
Yours is a noble grant.
I know to hold your throne sublime
You'll battle 'til the end of time!

First, let us recognize that vocabulary is of small moment here; in that, even in a young college student, yea even in a high school student, all the words that are necessary to handle the concepts in this poem he already knows.

While it is not my intention to submit the poem for your evaluation, nevertheless to illustrate my point I must call your attention to the fact that it does contain imagery. *Imagination* is certainly at work in producing analogy, figure of speech, personification, and I hope some original bits of thought and phrasing. Obviously, there is a *deep emotional experience* (the motivating force behind all poetry) which I felt impelled to write about. There is, I hope, something in the poem which you will recognize as *symbolic* for the appreciation humans place on the value of the struggle for what they believe in, i.e., the beautiful, as exemplified in the view commanded by this tree; and further I believe this *interpretation* has a universal appeal which goes beyond color, class, creed, or time. The central idea and unity hardly needs to be mentioned, that is, the importance of a concept of *character in the value system* of the one who would stand alone against all odds.

There is a certain *rhythm* or cadence that has been patterned to the poetic line. The analogies, metaphors, and similes stress in concrete terms my internal feelings at the time. I suppose I must leave it to you to judge if it has any artistic significance. At any rate, it bears the stamp of my personality at that time, and I am quite aware that even today, I am moved by that fundamental law in nature which causes all its species to struggle to survive. More particularly, the need man shows in his struggle for the freedom to live via an ideal; and yet, paradoxically, the tendency for man to become, all too often, so involved in the struggle itself that he forgets the very values that caused him to enter into the struggle in the first place!

The Long Search

But let me go on to the second poem which illustrates, I think, more depth in that my search for the precise words to express my feelings took something like thirty years. But the search was not only for the right word; but more important, it was a search to understand in the nature of man what I felt as an individual. The imagery here, the comparisons, figures of speech, allusions, analogies, and sensory appeals all deal with the essence of *inner* man. They are concerned with the tendency of man to wonder at the beauty and goodness of nature, and then to make symbolic rites to express the deeper significance which his feelings tell him these outward signs must represent.

In this poem you will hear reflected the inherent need, shown from the beginning of time, of the race to worship, to make sacrifice, to spill blood. Perhaps you can understand and empathize with me, when I say it took a great deal of reading on my part before I accidentally hit upon such terms as *empyreal* which pertains to the highest spiritual region of heaven, the celestial beyond, formed originally of the primordial light or fire; *tellurian* which means earthly; *Prometheus* a Greek god who stole fire from heaven and brought it to earth as a gift to mankind; alpenglow and *erubescence*, which is the process of growing or glowing a fiery red; *nova* of course means a great star which suddenly flares up in the heavens and then fades away; and *umbellate* and *umbellulate* has to do with the phenomenon you have seen in some flowers when they burst forth with many little stems, then at the end of each of these another set of stems appears each with its delicate little blossoms—like the multiple bursts of fireworks seen in the sky. The *real growth*, of course, came *not* from these particular words, but in the hundreds of new words—concepts which I pondered and rejected in my search for these!

The poet searching for the right word to express precisely what he means is the very essence of the poetic *effort*. But, as so many have said before me, the *imagination* is the quality that distinguishes poetry from verse, and in the following poem it is the imagination which plays with the ideas that have puzzled mankind, the ideas that demand from man a philosophical interpretation of our race's long contemplation on the identity and meaning of Life and the real and symbolic importance of fire.

One stands at night in the floor of the valley and waits for the fire to fall. As he stands he contemplates. He waits; nothing happens; in the darkness of a summer's night his eyes go aloft searching this huge granite wall for the first speck of light that would indicate it is about time for the huge ball of embers to rise some 40 feet on the upcurrent, linger, burst, and then pour over the edge of overhanging rock on Glacial Point, which stands more than 3,000 feet above Camp Curry. There are always long moments of silence. As one anticipates this event one does a great deal of thinking. Just before the fire falls, one faintly hears a voice floating down from overhanging rock announcing that the fire falls are about to begin.

But let us turn to the poem which for *me* exemplifies one of the end products of the growth of which I speak, and also highlights the hypothesis that *it is in the struggle to create that the child discovers his mind;* and, it is out of this struggle to interpret that the powerful reader becomes intimately acquainted with the kinds of feelings and depths of meanings found in powerful writing.

The Firefalls[*]

(From Camp Curry, Yosemite National Park)

Somber stone, solemnly sweeping toward the silent skies,
  Transcendent in your hushed and massive grace
You rise—a sacred altar; symbol of Eternal Life,
  Serenity, and Faith—an imperturbable granite base.
Awesome to the vision, compelling to the soul, you rise—
  While man, in darkness, contemplates the Spark Divine.
Imagination, kindled in a deep compassion, upward climbs—
  Soaring, *searching* for the empyreal light in life's design.
'Tis here one stands before the Rock of Heaven! tellurian
  Shrine of Paradise, catching in the Infinite a pause,
A sense of knowing something of that integrating Oneness
  Which brings the laws of Nature into harmony with *cause*.
'Tis with profound reverence one awaits the Promethean song;
  Fancies the faintest whispers. — The music of the spheres,
E'er audible, intones the celestial call: "The Fire Falls!"
  And then—
A glorious burst of brightness torches up an alpen-glow!
  O'er-powered in such splendor, the burst explodes anew;
Boldly, suspended in the darkness, this blazen erubescence
  Lingers, then down—down, down the nova queues!
Down, down the vanguard comes, a million umbelluting embers
  Cascading in a dazzling bloom. From Heaven's Hearth
Again and again the flame flares high—spun from the sun,
  Burns blood-red, and spills o'er the brim of the earth.
Enquisite, star-lit beauty — drifting; this flawless sacrifice
  Consummates the soul; Enraptured, radiant in the inner light,
One senses Oneness with his Maker, knows fulfillment—as,
  His sacred gift to mankind goes drifting through the night!

Conclusion

The final point I wish to make is this: having a poem to write, or poems to write, as the case actually is, structures one's value system so that his energies are mobilized and his emotional, perceptual, and intellectual faculties are sensitized toward the appreciation and understanding of all he reads, sees, and experiences. He actively is on the lookout for those great concepts, ideas, and words which one finds in the heritage of literature and science, the words by which he himself can later express these concepts and experiences which mean so much to him. For, I submit, it is only in the creative effort that the child may discover his mind, and it is precisely this quality which lifts the most powerful reader above his powerful peers!

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C. *American Educational Research Association*

The Future of Reading Research

HELEN M. ROBINSON

Examination of one side of the research coin reveals a bright future for research in reading. In it is reflected the number of significant problems urgently in need of scientific study. Besides, the possibility of securing sufficient funds for fundamental reading research looks especially promising.

The other side of the coin shows a dearth of competent young research persons who report continuous and significant investigations. The recent trend appears to be toward numbers of single investigations, often concerned with pedantic topics and frequently poorly designed. Many treatment experiments continue only a few weeks with intensive stimulation to the experimental group while none is given the control group. The findings are limited and the conclusions are inconclusive. Consequently the unsophisticated reader of the research on a given topic is confused by different conclusions from experiments that appear to be similar.

In order to improve the prospects for reading research, it is essential to begin to reward investigators who are willing to spend a number of years on longitudinal studies, who are sufficiently imaginative to carry on a number of pilot studies when they use new techniques, and especially those who are ready to suspend judgment until all of the data are collected. Finally, the journals reporting research should become increasingly selective so that full reports of important research can be made.

Research Procedures

Reviews of recent research reveal a preponderance of studies of the status of different groups of readers, using the survey technique and standardized tests. Other common types of research may be described as comparative and descriptive. Most investigations are concerned primarily with general tendencies of groups of learners, while less attention has been given to characteristics of deviates or how to teach them to read. In recent years, a limited number of studies have been concerned with the reading process. Such investigations are essential to gain greater insight into the ways children and youth learn, and the use they make of various reading skills and abilities. Strang suggests this approach as a means of understanding the dynamics of reading, and concludes that such insights "might either confirm or revolutionize our methods of teaching and testing reading."[1]

Cross-sectional studies are common today and, in many instances, unwarranted implications are drawn from short-term comparisons. Despite the cost in time and energy, many more longitudinal studies are needed to make valid comparisons of the effects of different types of treatments. For example, certain methods of teaching may create earlier or more dramatic gains in specific aspects of reading than others, but the results may not be as lasting or useful to the learner as he matures. In some instances, a given method may actually inhibit the development of other aspects of reading.

In designing future research, continuous attention should be given to the Hawthorne effect. Frequently one control class is compared with an experimental class in which the change in teaching is given credit for greater gains. The method of natural variation permits comparisons between two methods of teaching where each has been used for several years, where teachers no longer find the change novel or stimulating so that learners are affected. Second, when changes in methods or materials are essential to an experiment, it is possible to offer an equal amount of stimulation to the teachers using the control method or materials so that they may teach with renewed vigor.

Promising new procedures need to be investigated by researchers having different kinds of orientation, using learners with various capacities and backgrounds, to ascertain the values as well as the limitations of such procedures. Large-scale research involving a number of comparisons of methods and materials of teaching will call for comparable designs, controls, and instruments of appraisal.

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[1] Ruth Strang, *Reactions to Research on Reading, Educational Forum,* XXVI (January, 1962), p. 192.

Those who have studied reading recognize the complexity of the process and procedures. In the past, reading investigators have been criticized for being uninformed of many recent developments in related fields. However, the current interest of psychologists, sociologists, speech specialists, linguists, neurologists, vision and hearing specialists, and parents forecasts a team approach to research. Cooperative efforts may open up new vistas.

When more complex problems are investigated, standardized tests will need to be supplemented by other techniques. Rating scales, questionnaires, and structured observation may be used to probe selected facets of reading. Both the incomplete statement and carefully selected or constructed pictures may yield projective-type information of great value. Introspection and retrospection have been used sparingly but produce leads for controlled experimentation, as well as the development of new types of reading tests. The structured interview looks promising for investigating attitudes toward, and concepts of, reading. The intensive and extensive case study techniques produce some subjective data but they offer opportunities for the synthesis of many facets of reading and related factors and may be useful to investigate the dynamics of learning and using reading. Time-study techniques which have proved useful in industry may suggest new hypotheses to be tested.

Undoubtedly imaginative new research techniques will emerge as the more subtle aspects of reading are probed. Problems of quantifying, objectifying, and interpreting the data are persistent but not insurmountable.

New theoretical frameworks are being developed for the reading process which may open up additional avenues of study. For example, Holmes and Singer's[2] factor analysis of reading test scores led to the identification of substrata factors which contribute to reading ability. Obviously, only those factors already identified, for which tests were available were included.

As Gates pointed out, "many statistical procedures work well only when the data fall into certain strait jackets."[3] However, new means for processing data are forecast as the electronic age continues its unprecedented pace. Even with present computers, masses of data may be processed in a relatively short time. It is even possible to relate a large number of quantitative and qualitative data for individual learners to identify patterns of abilities. The combination of imaginative new research techniques and improved means of analysis will surely be reflected in future research.

Research designs merit first-order consideration. The new *Handbook of Research on Teaching*,[4] prepared by the American Educational Research Association should serve as a useful guide to improve research.

Replication of promising research is essential before new plans or practices are advocated, as is the plan in medicine.

Campbell and Stanley state that "The experiments we do today, if successful, will need replication and cross validation at other times under other conditions before they can become an established part of science, before they can be theoretically interpreted with confidence."[5]

Areas for Future Research

Although some 5,000 published reports of research have accumulated, many areas, such as methods for teaching beginning reading, have been heavily represented while others, such as critical reading, are meagerly represented. However, few decisions remain unquestioned. In this respect, all areas of reading become an open field for definitive research.

As pointed out earlier, many areas in which the findings are inconclusive should be approached with improved research designs, studied over longer periods of time, and reported in greater detail. Examples of such areas include methods and materials for beginning reading, vocabulary development, and causes of reading disability. New dimensions and concepts of such areas may well be incorporated. For example, the linguists may make a genuine contribution to research in vocabulary development. Likewise, promising techniques for identifying minimally brain-damaged children may add a new dimension, or serve as a unifying factor in understanding isolated defects.

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[2] Jack A. Holmes and Harry Singer, *The Substrata-Factor Theory: Substrata-Factor Differences Underlying Reading Ability in Known Groups.* Washington, D. C.: Superintendent of Documents, U. S. Government Printing Office, 1962.

[3] Arthur I. Gates, "The Future of Research in Reading," *Education*, LXXXII (May, 1962), p. 550.

[4] *Op. cit.*

[5] Donald T. Campbell and Julian C. Stanley, "Experimental and Quasi-Experimental Designs for Research on Teaching," *Handbook of Research on Teaching* (N. L. Gage, ed.). Chicago: Rand McNally, 1963, p. 173.

It often comes as a surprise to embryonic researchers that so much has been written about certain topics, yet so few studies support what has been written. For example, little research is available to suggest the most useful sequence in developing competency in reading. Logical decisions have necessarily been adopted to produce curriculum and basal reading materials until empirical evidence is available. This area is overdue for careful study. Perhaps the advent of programed materials will serve as a useful tool for the study of sequential development of reading skills and abilities.

An aspect such as reading for different purposes is advocated in nearly all major reading texts, yet the paucity of research about how children, youth, and adults read for different purposes is surprising. The limited number of studies available appear to consider only the speed of reading, perhaps because this facet is readily measurable.

Likewise, skimming is widely recommended but has been the topic of only a few isolated studies. Techniques of investigation have been developed in recent years so that the area will surely be explored soon.

Critical reading, which is essential to after-school self-education, is a focal problem according to Austin, et al.[6] A few preliminary investigations have been reported but with different definitions and at only a few grade levels. So far, little conclusive evidence has been gathered to guide teachers as to the age or grade level at which critical reading can be introduced or the sequence of teaching the essential skills.

Reading in content areas, often referred to as reading-study skills, has been exposed sporadically but not systematically. Longitudinal research in the specific areas would be most helpful, especially if the attitudes, skills, and abilities in each of the content fields were identified.

Although a sizable volume of research has been done with retarded readers, only a few projects have explored the possible effects of minimal brain damage. Also, prediction of the responses of pupils with varying characteristics to different remedial treatments, followed by testing the efficacy of the predictions, has been almost entirely neglected. A study of the relative efficiency of individual and group remediation for pupils with differing characteristics and personalities might yield very useful results.

In the area of the sociology of reading, little is known about the influence of reading different kinds of materials on pupils' personality development and attitudes. The relative effects of reading, films, radio, and television have not been established. The correlation of literacy level to social and economic status of groups has been shown to be high but the cause-effect relationship has not been determined. One of the most urgent problems is to discover ways to reduce illiteracy in a relatively short period of time, with the hope that it will increase employability as well as personal and social status.

In all of the areas mentioned it is essential to know more than we do at present about the processes of learning and teaching reading. The results of Barton's[7] study of the training of productive investigators in reading may point the way to improve the graduate programs for producing higher quality researchers.

Quality in future research is not wishful thinking or an idle dream—it is an absolute necessity. Unless the private and public funds beginning to filter into reading research yield results which can be translated into the improvement of reading instruction, we will have betrayed our donors.

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[6] Mary C. Austin, *The Torch Lighters.* Cambridge: Harvard University Press, 1961, pp. 48 and 51.

[7] Allen H. Barton, "The Sociology of Reading Research," *Teachers College Record,* LXIII (November, 1961), pp. 94-101.